

SEQUENCE LISTING

<110> Brandt, Kevin S.
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<120> FLEA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE
NUCLEIC ACID MOLECULES, PROTEINS AND USES THEREOF

<130> FC-6-C1

<140> not yet assigned

<141> 2000-04-07

<150> 60/128,704

<151> 1999-04-09

<160> 1959

<170> PatentIn Ver. 2.1

<210> 1

<211> 2057

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (152)..(1303)

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1

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Phe Leu Leu Val Ile Met Leu Asn Cys Lys Asn Leu Val Asn Ala Ala

10

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Cys Thr Asn Asn Ala Pro Pro Met Lys Ile Phe Arg Ser Arg Arg Val

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gct aac gaa act aaa gtt gag gtg ttg gac tac ggt caa ttt tca ata	412
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75 80 85	
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Trp Pro Gly Val Ile Asp Ser His Val His Val Asn Glu Pro Gly Arg	
90 95 100	
gaa tcc tgg gaa gga tac acc aca gct act aaa gca gca gct tgg ggc	508
Glu Ser Trp Glu Gly Tyr Thr Thr Ala Thr Lys Ala Ala Ala Trp Gly	
105 110 115	
ggg att acc aca ata gta gac atg cct ttg aat tcc atc cca cct aca	556
Gly Ile Thr Thr Ile Val Asp Met Pro Leu Asn Ser Ile Pro Pro Thr	
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cac gaa ttg ttg cca ctt atc aac gcc gga gta aga gga ttc aaa tgt	700
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Phe Thr Ser Glu Ser Gly Val Asp Glu Phe Pro Gln Val Thr Lys Asn	
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Asp Leu Glu Met Ala Leu Lys Glu Leu Gln Lys Ala Asn Ser Val Leu	
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ctg tac cat gcc gaa tta ccc gct cct caa gaa aat gtt aca agc aat	844
Leu Tyr His Ala Glu Leu Pro Ala Pro Gln Glu Asn Val Thr Ser Asn	
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0991936-11210

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ttg aaa aaa gcg cgc tca gag aac gtt cca ctt tcg att gaa act tgt 1036
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cat cat tac tta acc ttt gct gct gaa gat gtt cca gat gga cat act 1084
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315 320 325

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cct gat ttc cta aaa gct tgg ggt gga att gct ggt atg cag ttt gga 1276
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360 365 370 375

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380

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 35 40 45
 Ala Gly Ile Val Val Asp Ser Ser Gly Arg Ile Lys Ser Ile Ile Ser
 50 55 60
 Gly Glu Glu Val Glu Arg Ile Ala Asn Glu Thr Lys Val Glu Val Leu
 65 70 75 80
 Asp Tyr Gly Gln Phe Ser Ile Trp Pro Gly Val Ile Asp Ser His Val
 85 90 95
 His Val Asn Glu Pro Gly Arg Glu Ser Trp Glu Gly Tyr Thr Thr Ala
 100 105 110
 Thr Lys Ala Ala Ala Trp Gly Gly Ile Thr Thr Ile Val Asp Met Pro
 115 120 125

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Val	Asn	Ser	Ala	Cys	Gly	Lys	Thr	His	Val	Asp	Val	Ala	Phe	Trp	Gly	145	150	155	160
Gly	Val	Ile	Pro	Gly	Asn	Ala	His	Glu	Leu	Leu	Pro	Leu	Ile	Asn	Ala	165	170	175	
Gly	Val	Arg	Gly	Phe	Lys	Cys	Phe	Thr	Ser	Glu	Ser	Gly	Val	Asp	Glu	180	185	190	
Phe	Pro	Gln	Val	Thr	Lys	Asn	Asp	Leu	Glu	Met	Ala	Leu	Lys	Glu	Leu	195	200	205	
Gln	Lys	Ala	Asn	Ser	Val	Leu	Leu	Tyr	His	Ala	Glu	Leu	Pro	Ala	Pro	210	215	220	
Gln	Glu	Asn	Val	Thr	Ser	Asn	Glu	Thr	Glu	Lys	Tyr	Met	Thr	Tyr	Leu	225	230	235	240
Lys	Thr	Arg	Pro	Pro	Ser	Met	Glu	Val	Asn	Ala	Ile	Asp	Met	Ile	Ile	245	250	255	
Asp	Leu	Thr	Lys	Lys	Tyr	Lys	Val	Arg	Ser	His	Ile	Val	His	Leu	Ser	260	265	270	
Ala	Ala	Gly	Ala	Leu	Pro	Gln	Leu	Lys	Lys	Ala	Arg	Ser	Glu	Asn	Val	275	280	285	
Pro	Leu	Ser	Ile	Glu	Thr	Cys	His	His	Tyr	Leu	Thr	Phe	Ala	Ala	Glu	290	295	300	
Asp	Val	Pro	Asp	Gly	His	Thr	Glu	Tyr	Lys	Cys	Ala	Pro	Pro	Ile	Arg	305	310	315	320
Glu	Glu	Ser	Asn	Gln	Glu	Lys	Leu	Trp	Gln	Ala	Leu	Glu	Asn	Arg	Asp	325	330	335	
Ile	Asp	Met	Val	Val	Ser	Asp	His	Ser	Pro	Ser	Pro	Ala	Ala	Leu	Lys	340	345	350	
Gly	Leu	Cys	Asn	Gly	Cys	His	Pro	Asp	Phe	Leu	Lys	Ala	Trp	Gly	Gly	355	360	365	
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<213> Ctenocephalides felis

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<222> (1)..(1152)

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aag aac ctt gtt aat gct gcg tgc acc aac aac gcg cct cca atg aag 96
Lys Asn Leu Val Asn Ala Ala Cys Thr Asn Asn Ala Pro Pro Met Lys
20 25 30

ata ttc cgt agc cga aga gtt ctt ctc ggt gat ggt act gaa aga gat 144
Ile Phe Arg Ser Arg Arg Val Leu Leu Gly Asp Gly Thr Glu Arg Asp
35 40 45

gct ggc att gta gtt gat tcc tcc gga aga ata aaa agt ata att tca 192
Ala Gly Ile Val Val Asp Ser Ser Gly Arg Ile Lys Ser Ile Ile Ser
50 55 60

gga gaa gaa gtg gaa agg ata gct aac gaa act aaa gtt gag gtg ttg 240
Gly Glu Glu Val Glu Arg Ile Ala Asn Glu Thr Lys Val Glu Val Leu
65 70 75 80

gac tac ggt caa ttt tca ata tgg cca ggt gtg ata gac tct cat gtg 288
Asp Tyr Gly Gln Phe Ser Ile Trp Pro Gly Val Ile Asp Ser His Val
85 90 95

cac gtc aac gaa cca gga aga gaa tcc tgg gaa gga tac acc aca gct 336
His Val Asn Glu Pro Gly Arg Glu Ser Trp Glu Gly Tyr Thr Thr Ala
100 105 110

act aaa gca gca gct tgg ggc ggg att acc aca ata gta gac atg cct 384
Thr Lys Ala Ala Ala Trp Gly Gly Ile Thr Thr Ile Val Asp Met Pro
115 120 125

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Leu Asn Ser Ile Pro Pro Thr Thr Thr Val Glu Asn Leu Arg Thr Lys
130 135 140

gtg aat tca gcc tgt ggt aaa acg cat gtt gat gtc gct ttc tgg gga 480
Val Asn Ser Ala Cys Gly Lys Thr His Val Asp Val Ala Phe Trp Gly
145 150 155 160

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Gly Val Ile Pro Gly Asn Ala His Glu Leu Leu Pro Leu Ile Asn Ala	
165 170 175	
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Phe Pro Gln Val Thr Lys Asn Asp Leu Glu Met Ala Leu Lys Glu Leu	
195 200 205	
cag aaa gca aat tcc gta ctt ctg tac cat gcc gaa tta ccc gct cct	672
Gln Lys Ala Asn Ser Val Leu Leu Tyr His Ala Glu Leu Pro Ala Pro	
210 215 220	
caa gaa aat gtt aca agc aat gaa act gaa aag tac atg act tac ctg	720
Gln Glu Asn Val Thr Ser Asn Glu Thr Glu Lys Tyr Met Thr Tyr Leu	
225 230 235 240	
aaa aca cga cct cca agt atg gaa gta aat gct att gat atg att ata	768
Lys Thr Arg Pro Pro Ser Met Glu Val Asn Ala Ile Asp Met Ile Ile	
245 250 255	
gac ctc aca aaa aaa tat aaa gtt agg tct cac ata gtg cat cta tca	816
Asp Leu Thr Lys Lys Tyr Lys Val Arg Ser His Ile Val His Leu Ser	
260 265 270	
gca gca ggt gct tta ccg caa ttg aaa aaa gcg cgc tca gag aac gtt	864
Ala Ala Gly Ala Leu Pro Gln Leu Lys Lys Ala Arg Ser Glu Asn Val	
275 280 285	
cca ctt tcg att gaa act tgt cat cat tac tta acc ttt gct gct gaa	912
Pro Leu Ser Ile Glu Thr Cys His His Tyr Leu Thr Phe Ala Ala Glu	
290 295 300	
gat gtt cca gat gga cat act gaa tac aaa tgc gct cca cca att aga	960
Asp Val Pro Asp Gly His Thr Glu Tyr Lys Cys Ala Pro Pro Ile Arg	
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gaa gaa agt aat caa gaa aaa tta tgg caa gct ttg gaa aac aga gat	1008
Glu Glu Ser Asn Gln Glu Lys Leu Trp Gln Ala Leu Glu Asn Arg Asp	
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Ile Asp Met Val Val Ser Asp His Ser Pro Ser Pro Ala Ala Leu Lys	
340 345 350	

ggc ctg tgc aat ggt tgt cat cct gat ttc cta aaa gct tgg ggt gga 1104
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 355 360 365

att gct ggt atg cag ttt gga tta tct tta ata agg gac cgg tgc ttc 1152
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Ile Phe Arg Ser Arg Arg Val Leu Leu Gly Asp Gly Thr Glu Arg Asp
 35 40 45

Ala Gly Ile Val Val Asp Ser Ser Gly Arg Ile Lys Ser Ile Ile Ser
 50 55 60

Gly Glu Glu Val Glu Arg Ile Ala Asn Glu Thr Lys Val Glu Val Leu
 65 70 75 80

Asp Tyr Gly Gln Phe Ser Ile Trp Pro Gly Val Ile Asp Ser His Val
 85 90 95

His Val Asn Glu Pro Gly Arg Glu Ser Trp Glu Gly Tyr Thr Thr Ala
 100 105 110

Thr Lys Ala Ala Ala Trp Gly Gly Ile Thr Thr Ile Val Asp Met Pro
 115 120 125

Leu Asn Ser Ile Pro Pro Thr Thr Thr Val Glu Asn Leu Arg Thr Lys
 130 135 140

Val Asn Ser Ala Cys Gly Lys Thr His Val Asp Val Ala Phe Trp Gly
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Gly Val Ile Pro Gly Asn Ala His Glu Leu Leu Pro Leu Ile Asn Ala
 165 170 175

Arg Cys Ile Pro Thr Pro Pro Gly Glu Glu Cys Lys Ser Glu Ile Ala
260 265 270

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Lys

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35 40 45
Thr Asn Lys Gln Leu Gly Thr Phe Cys His Asp Cys Ser Thr Leu Lys
50 55 60
Leu Cys Ala Gly Gln Glu Thr Pro Ile Thr Thr Ile Asn Cys Arg Asp
65 70 75 80
Ser Asn Ser Asp Ala Pro Phe Cys Val Asp Asp Met Cys Ser Ser Lys
85 90 95
Pro Gly Glu Asn Cys Lys Thr Ala Glu Thr Thr Cys Ala Val Val Gly
100 105 110
Tyr Gln Pro Asp Pro Lys Asp Cys Thr Arg Tyr Leu Phe Cys Lys Asp
115 120 125
Gly Lys Gly Gln Val Phe Glu Cys Pro Pro Asn Tyr Val Tyr Asp His

140

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260 265 270

<213> Ctenocephalides felis

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ctatagttaa	ggacattttg	tttgtgtctc	ttacataaaa	tacaatttta	tacatttttaa	180
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 Val Ala Ala Asp Arg Asn Ser Pro Thr Tyr Val Arg Gly Phe Pro Val
 20 25 30

gga aga tcc aga gca cga aca aca ttt ggc aat gaa gaa ata aag tgt 144
 Gly Arg Ser Arg Ala Arg Thr Thr Phe Gly Asn Glu Glu Ile Lys Cys
 35 40 45

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 Leu Cys Ala Gly Gln Glu Thr Pro Ile Thr Thr Ile Asn Cys Arg Asp
 65 70 75 80

tca aat tcc gat gct cca ttt tgt gta gat gat atg tgc tca tca aaa 288
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 85 90 95

cct ggg gaa aac tgt aag acg gca gaa act aca tgc gcc gtt gta gga 336
 Pro Gly Glu Asn Cys Lys Thr Ala Glu Thr Thr Cys Ala Val Val Gly
 100 105 110

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 ctgtttataa ttcataatat aaccgcatct tttatttcta attttatctt ttagtgaata 240
 aatttatttg ttgttgaata aattaataat tgtgtacgtt caatttggtc gtg atg 296
 Met
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gag aaa ata gtt gga cgc gat gga aca gaa gtc atc aca tac gag ttt 344
 Glu Lys Ile Val Gly Arg Asp Gly Thr Glu Val Ile Thr Tyr Glu Phe
 5 10 15

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 Asp Asp Val Ala Thr Leu Pro Glu Asp Met Pro Met Glu Leu Lys Asp
 210 215 220 225

cac ata caa agt ctc aag ccg gat gag aga aaa caa att tgg gtt tcg 1016
 His Ile Gln Ser Leu Lys Pro Asp Glu Arg Lys Gln Ile Trp Val Ser
 230 235 240

tgt caa gga gaa aat cca gtt gat cga gaa aat ttg ggc cca gtt gaa 1064
 Cys Gln Gly Glu Asn Pro Val Asp Arg Glu Asn Leu Gly Pro Val Glu
 245 250 255

atg tat cca agc atg gga ttt gct gga tat tat tat cca ttc aga aac 1112
 Met Tyr Pro Ser Met Gly Phe Ala Gly Tyr Tyr Tyr Pro Phe Arg Asn
 260 265 270

caa cga gat tat ctt agt cca tta gtt gct gtt caa ttc aaa aga cct 1160
 Gln Arg Asp Tyr Leu Ser Pro Leu Val Ala Val Gln Phe Lys Arg Pro
 275 280 285

aca gtg gga cgt ttg atc aac gtg gaa tgt cgt gcc tgg gcc agg aac 1208
 Thr Val Gly Arg Leu Ile Asn Val Glu Cys Arg Ala Trp Ala Arg Asn
 290 295 300 305

atc atc tat cgt ggt ggc aac aag gat cga caa gga tcc gtc cat ttc 1256
 Ile Ile Tyr Arg Gly Gly Asn Lys Asp Arg Gln Gly Ser Val His Phe
 310 315 320

gaa ctg atg att gat tagaatcgac attattagt ttaattttac tttattgata 1311
 Glu Leu Met Ile Asp
 325

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ctataaatgt gtaaataat gttattta atagtacaaa acaagttgat ttatttaagt 1611

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 Pro Ser Ala Trp Ala Arg Val Ser Leu Phe Tyr Leu Val Phe Tyr Thr
 50 55 60
 Val Leu Ala Ser Leu Phe Thr Ile Cys Met Tyr Thr Met Leu Ser Thr
 65 70 75 80
 Ile Asp Lys Glu Tyr Pro Lys Trp Gln Leu Glu Asp Ser Ile Ile Gly
 85 90 95
 Thr Asn Pro Gly Leu Gly Phe Arg Pro Ile Ala Asp Asn Thr Glu Glu
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 Gly Ser Leu Ile Trp Phe Asp Ala Lys Asn Glu Thr Glu Val Ala Lys
 115 120 125
 Trp Thr Thr Ile Ile Asp Glu Phe Leu Ala Pro Tyr Lys Asn Arg Ser
 130 135 140
 Gln Leu Pro Ser His Gly Glu Asn Gln Met Phe Cys Asp Tyr Glu Thr
 145 150 155 160
 Gly Pro Asn Thr Ala Asn Arg Val Cys Ala Val Ala Val Glu Lys Trp
 165 170 175
 Gly Ser Cys Thr Ser Gln Ala Asn Tyr Gly Phe Gly Gln Ser Ala Pro
 180 185 190
 Cys Val Phe Leu Lys Leu Asn Arg Ile Tyr Asn Trp Val Pro Asp Tyr
 195 200 205
 Tyr Asp Asp Val Ala Thr Leu Pro Glu Asp Met Pro Met Glu Leu Lys
 210 215 220

Asp His Ile Gln Ser Leu Lys Pro Asp Glu Arg Lys Gln Ile Trp Val
225 230 235 240

Ser Cys Gln Gly Glu Asn Pro Val Asp Arg Glu Asn Leu Gly Pro Val
245 250 255

Glu Met Tyr Pro Ser Met Gly Phe Ala Gly Tyr Tyr Tyr Pro Phe Arg
260 265 270

Asn Gln Arg Asp Tyr Leu Ser Pro Leu Val Ala Val Gln Phe Lys Arg
275 280 285

Pro Thr Val Gly Arg Leu Ile Asn Val Glu Cys Arg Ala Trp Ala Arg
290 295 300

Asn Ile Ile Tyr Arg Gly Gly Asn Lys Asp Arg Gln Gly Ser Val His
305 310 315 320

Phe Glu Leu Met Ile Asp
325

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<212> DNA
<213> Ctenocephalides felis

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ataaatatta aaatcttaca cctttaatga taacaaaacc gcgtaaactt tatttagata 240
taaataataaa gtctattata ctcaaagttc attttgattt attaaacact tcattaatta 300
tcatacttaa aattaaaact taaattctat tcacaacatc gacgtacgag ctattttgca 360
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taacactaat aatgtcgatt ctaatcaatc atcagttcga aatggacgga tccttgtcga 480
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cccaaatttt ctcgatcaac tggattttct ccttgacacg aaacccaaat ttgttttctc 720
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Phe Glu Leu Met Ile Asp			
325			
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Pro Ser Ala Trp Ala Arg Val Ser Leu Phe Tyr Leu Val Phe Tyr Thr			
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Val Leu Ala Ser Leu Phe Thr Ile Cys Met Tyr Thr Met Leu Ser Thr			
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Ile Asp Lys Glu Tyr Pro Lys Trp Gln Leu Glu Asp Ser Ile Ile Gly			
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Thr Asn Pro Gly Leu Gly Phe Arg Pro Ile Ala Asp Asn Thr Glu Glu			
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Trp Thr Thr Ile Ile Asp Glu Phe Leu Ala Pro Tyr Lys Asn Arg Ser			
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Gln Leu Pro Ser His Gly Glu Asn Gln Met Phe Cys Asp Tyr Glu Thr			
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Gly Pro Asn Thr Ala Asn Arg Val Cys Ala Val Ala Val Glu Lys Trp			

165	170	175
Gly Ser Cys Thr Ser Gln Ala Asn Tyr Gly Phe Gly Gln Ser Ala Pro		
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Cys Val Phe Leu Lys Leu Asn Arg Ile Tyr Asn Trp Val Pro Asp Tyr		
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Tyr Asp Asp Val Ala Thr Leu Pro Glu Asp Met Pro Met Glu Leu Lys		
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Asp His Ile Gln Ser Leu Lys Pro Asp Glu Arg Lys Gln Ile Trp Val		
225	230	235 240
Ser Cys Gln Gly Glu Asn Pro Val Asp Arg Glu Asn Leu Gly Pro Val		
245	250	255
Glu Met Tyr Pro Ser Met Gly Phe Ala Gly Tyr Tyr Tyr Pro Phe Arg		
260	265	270
Asn Gln Arg Asp Tyr Leu Ser Pro Leu Val Ala Val Gln Phe Lys Arg		
275	280	285
Pro Thr Val Gly Arg Leu Ile Asn Val Glu Cys Arg Ala Trp Ala Arg		
290	295	300
Asn Ile Ile Tyr Arg Gly Gly Asn Lys Asp Arg Gln Gly Ser Val His		
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Phe Glu Leu Met Ile Asp		
325		

<210> 18
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 <212> DNA
 <213> Ctenocephalides felis

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 gaattgaaca gcaactaatg gactaagata atctcgttgg tttctgaatg gataataata 180
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atttgacgtg ttgggccccg tttcgtagtc gcagaacatt tgattttcac cgtggcttgg 540
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 <212> DNA
 <213> Ctenocephalides felis

<220>
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 acc agt att tca gaa gaa tct acc aca aaa ttg gta aaa aca acc act 96
 Thr Ser Ile Ser Glu Glu Ser Thr Thr Lys Leu Val Lys Thr Thr Thr
 20 25 30
 gaa gac aac cac ctc ggt gta aag agc ctg aat gaa cct ggt gat gaa 144
 Glu Asp Asn His Leu Gly Val Lys Ser Leu Asn Glu Pro Gly Asp Glu
 35 40 45
 caa gaa tta aaa aaa cca tca tca cat ggt aag gag cat att tct tta 192
 Gln Glu Leu Lys Lys Pro Ser Ser His Gly Lys Glu His Ile Ser Leu
 50 55 60
 cca gtg gct tca cca gta cca cca gta tcg cat atc ttc cag gct aca 240
 Pro Val Ala Ser Pro Val Pro Pro Val Ser His Ile Phe Gln Ala Thr
 65 70 75 80
 cca gga gac ctt tgt cca gcc ttc gac gat gca gat cgc ttc acc cag 288
 Pro Gly Asp Leu Cys Pro Ala Phe Asp Asp Ala Asp Arg Phe Thr Gln
 85 90 95
 aca gaa ctt ttg tcc agg ctg aca aac gat tgc agg tac gat aag ctg 336
 Thr Glu Leu Leu Ser Arg Leu Thr Asn Asp Cys Arg Tyr Asp Lys Leu
 100 105 110

His Thr Trp Thr Thr Met Thr Pro Gln Glu Ile Ser Met Trp Ile Asp
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Lys Arg Ser Arg Ile Cys Phe Pro Ile Ala Phe Ala Ile Phe Asn Phe
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Phe Tyr Trp Ile Phe Val Tyr Tyr Leu
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 <212> DNA
 <213> Ctenocephalides felis

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 taagaatctc ttttgattct attcacgttt cttttaaatt ttacatatat ttattttttaa 480
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 taaacaaata tccaataaaa aaagttaa atagcaaaag ctatcgggaa acaaattctg 600
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<210> 22

<211> 1707

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (1)..(1707)

<400> 22

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acc agt att tca gaa gaa tct acc aca aaa ttg gta aaa aca acc act 96
Thr Ser Ile Ser Glu Glu Ser Thr Thr Lys Leu Val Lys Thr Thr Thr
20 25 30

gaa gac aac cac ctc ggt gta aag agc ctg aat gaa cct ggt gat gaa 144
Glu Asp Asn His Leu Gly Val Lys Ser Leu Asn Glu Pro Gly Asp Glu
35 40 45

caa gaa tta aaa aaa cca tca tca cat ggt aag gag cat att tct tta 192
Gln Glu Leu Lys Lys Pro Ser Ser His Gly Lys Glu His Ile Ser Leu
50 55 60

cca gtg gct tca cca gta cca cca gta tcg cat atc ttc cag gct aca 240
Pro Val Ala Ser Pro Val Pro Pro Val Ser His Ile Phe Gln Ala Thr
65 70 75 80

cca gga gac ctt tgt cca gcc ttc gac gat gca gat cgc ttc acc cag 288
Pro Gly Asp Leu Cys Pro Ala Phe Asp Asp Ala Asp Arg Phe Thr Gln
85 90 95

aca gaa ctt ttg tcc agg ctg aca aac gat tgc agg tac gat aag ctg 336
Thr Glu Leu Leu Ser Arg Leu Thr Asn Asp Cys Arg Tyr Asp Lys Leu
100 105 110

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9
6
6
T
5
6
5
6

ggt ggg aca tac agt gcc tta agt ttc acg att caa ata agt cgt gaa	960
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305 310 315 320	
atg ggt tac tat tta atg gat tac ttt ttg cca tca gta atg atc gtg	1008
Met Gly Tyr Tyr Leu Met Asp Tyr Phe Leu Pro Ser Val Met Ile Val	
325 330 335	
tcg tgt tcc tgg gta agt ttt tgg ctg gca gca gac caa tca gca ccc	1056
Ser Cys Ser Trp Val Ser Phe Trp Leu Ala Ala Asp Gln Ser Ala Pro	
340 345 350	
aga gtc acc tta ggt aca agc acc atg tta tca ttt atc act tta gca	1104
Arg Val Thr Leu Gly Thr Ser Thr Met Leu Ser Phe Ile Thr Leu Ala	
355 360 365	
agt gcc caa gga aaa act tta ccc aaa gta tcg tac atc aaa gct tca	1152
Ser Ala Gln Gly Lys Thr Leu Pro Lys Val Ser Tyr Ile Lys Ala Ser	
370 375 380	
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Glu Ile Trp Phe Leu Gly Cys Thr Gly Phe Ile Phe Gly Ser Leu Val	
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Leu Lys Lys Val Asn Ser Lys Tyr Ile Leu Lys Ser Thr Leu Thr Pro	
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Arg Leu Ala Arg Lys Glu Phe His Ala Ser Phe Asn Ser Asn Pro Gly	
435 440 445	
ggt ggt aat aag gat gat cag gat ttg gga aga ggg att agg gtc ttt	1392
Gly Gly Asn Lys Asp Asp Gln Asp Leu Gly Arg Gly Ile Arg Val Phe	
450 455 460	
ccg ccg cct ttg gtc aag gct agg tct tgt tcc agt ctg gat agg agt	1440
Pro Pro Pro Leu Val Lys Ala Arg Ser Cys Ser Ser Leu Asp Arg Ser	
465 470 475 480	
aat gga tcc ggg aat ttt ttg agc gtc cat gga aat gat cac aaa gtt	1488
Asn Gly Ser Gly Asn Phe Leu Ser Val His Gly Asn Asp His Lys Val	
485 490 495	

cca aca ata aca gca caa tgt gca gac gat gcc gca agt gac cag att 1536
Pro Thr Ile Thr Ala Gln Cys Ala Asp Asp Ala Ala Ser Asp Gln Ile
500 505 510

tca gtt tgt gtc gat ggg gaa aac gaa gaa cct gca caa att gtt cac 1584
Ser Val Cys Val Asp Gly Glu Asn Glu Glu Pro Ala Gln Ile Val His
515 520 525

cac acc tgg acg acg atg aca cct caa gaa att tcc atg tgg att gac 1632
His Thr Trp Thr Thr Met Thr Pro Gln Glu Ile Ser Met Trp Ile Asp
530 535 540

aaa agg tcc aga att tgt ttc ccg ata gct ttt gct ata ttt aac ttt 1680
Lys Arg Ser Arg Ile Cys Phe Pro Ile Ala Phe Ala Ile Phe Asn Phe
545 550 555 560

ttt tat tgg ata ttt gtt tat tat tta 1707
Phe Tyr Trp Ile Phe Val Tyr Tyr Leu
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<210> 23

<211> 569

<212> PRT

<213> Ctenocephalides felis

<400> 23

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20 25 30

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35 40 45

Gln Glu Leu Lys Lys Pro Ser Ser His Gly Lys Glu His Ile Ser Leu
50 55 60

Pro Val Ala Ser Pro Val Pro Pro Val Ser His Ile Phe Gln Ala Thr
65 70 75 80

Pro Gly Asp Leu Cys Pro Ala Phe Asp Asp Ala Asp Arg Phe Thr Gln
85 90 95

Thr Glu Leu Leu Ser Arg Leu Thr Asn Asp Cys Arg Tyr Asp Lys Leu
100 105 110

Ser Ala Gln Gly Lys Thr Leu Pro Lys Val Ser Tyr Ile Lys Ala Ser
370 375 380

Glu Ile Trp Phe Leu Gly Cys Thr Gly Phe Ile Phe Gly Ser Leu Val
385 390 395 400

Glu Phe Ala Phe Val Asn Thr Ile Trp Arg Arg Arg Lys Asn Val Glu
405 410 415

Leu Lys Lys Val Asn Ser Lys Tyr Ile Leu Lys Ser Thr Leu Thr Pro
420 425 430

Arg Leu Ala Arg Lys Glu Phe His Ala Ser Phe Asn Ser Asn Pro Gly
435 440 445

Gly Gly Asn Lys Asp Asp Gln Asp Leu Gly Arg Gly Ile Arg Val Phe
450 455 460

Pro Pro Pro Leu Val Lys Ala Arg Ser Cys Ser Ser Leu Asp Arg Ser
465 470 475 480

Asn Gly Ser Gly Asn Phe Leu Ser Val His Gly Asn Asp His Lys Val
485 490 495

Pro Thr Ile Thr Ala Gln Cys Ala Asp Asp Ala Ala Ser Asp Gln Ile
500 505 510

Ser Val Cys Val Asp Gly Glu Asn Glu Glu Pro Ala Gln Ile Val His
515 520 525

His Thr Trp Thr Thr Met Thr Pro Gln Glu Ile Ser Met Trp Ile Asp
530 535 540

Lys Arg Ser Arg Ile Cys Phe Pro Ile Ala Phe Ala Ile Phe Asn Phe
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Phe Tyr Trp Ile Phe Val Tyr Tyr Leu
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<211> 1707

<212> DNA

<213> Ctenocephalides felis

<400> 24

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<210> 25
 <211> 1429
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (18)..(1211)

<400> 25
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 1 5 10
 att ttg tgc att tta ttt aga att tta aat gta aat aca caa ccg gga 98
 Ile Leu Cys Ile Leu Phe Arg Ile Leu Asn Val Asn Thr Gln Pro Gly
 15 20 25

tca ata tgc caa gga tac aac gcc att gag ggt acg aaa tgg cta ctg	722
Ser Ile Cys Gln Gly Tyr Asn Ala Ile Glu Gly Thr Lys Trp Leu Leu	
220 225 230 235	
aat tgg caa aat ttc cgt cgt ttc tac ttg tat gtt tta aca gaa agt	770
Asn Trp Gln Asn Phe Arg Arg Phe Tyr Leu Tyr Val Leu Thr Glu Ser	
240 245 250	
gta aag aca ata att ttg aaa cac aga cat att ctc ctg tcc gat gaa	818
Val Lys Thr Ile Ile Leu Lys His Arg His Ile Leu Leu Ser Asp Glu	
255 260 265	
atg aaa tta aaa tgc caa ttg aat gag aga gat ata gca tcg gca gcc	866
Met Lys Leu Lys Cys Gln Leu Asn Glu Arg Asp Ile Ala Ser Ala Ala	
270 275 280	
act ttg ccg gaa ttg gat gac gcc tat acg aga aaa gtt cac aag ttt	914
Thr Leu Pro Glu Leu Asp Asp Ala Tyr Thr Arg Lys Val His Lys Phe	
285 290 295	
cca tct gta aac gct ttg tac aaa tgg agt tcc tgc ata aac tac atc	962
Pro Ser Val Asn Ala Leu Tyr Lys Trp Ser Ser Cys Ile Asn Tyr Ile	
300 305 310 315	
cag gac att gaa act cca atg gtg ttc ata aat gct aaa gat gat cct	1010
Gln Asp Ile Glu Thr Pro Met Val Phe Ile Asn Ala Lys Asp Asp Pro	
320 325 330	
cta ctc cat gat acg ctt cta gac cct ata aga aaa att gct ggt tct	1058
Leu Leu His Asp Thr Leu Leu Asp Pro Ile Arg Lys Ile Ala Gly Ser	
335 340 345	
tct aga aga atg atc tac gta gaa ctt tct cat gga ggt cat cca aga	1106
Ser Arg Arg Met Ile Tyr Val Glu Leu Ser His Gly Gly His Pro Arg	
350 355 360	
ttc ttt gaa agg ggt ctc ata tac ccc aat ccc gtt acc tgg ata gat	1154
Phe Phe Glu Arg Gly Leu Ile Tyr Pro Asn Pro Val Thr Trp Ile Asp	
365 370 375	
agg gca gtg ata agc ttg gtt ggn ggt ctc ctg ctt gca cat aat gaa	1202
Arg Ala Val Ile Ser Leu Val Xaa Gly Leu Leu Leu Ala His Asn Glu	
380 385 390 395	
aag agc tat taaaccaatt tagatttata attattattt ataaaaattt	1251
Lys Ser Tyr	
atgaaatatt tttttgttat aaattgtgga tttatttttt tatttgtgct gtcttttgca	1311

Tyr Ser Leu Arg Gly Asn Ile Ile Thr Lys Tyr Leu Gly Glu Lys Thr
195 200 205

Lys Ile Lys Asn Gly Asn Ile Ile Gly Gly Ile Ser Ile Cys Gln Gly
210 215 220

Tyr Asn Ala Ile Glu Gly Thr Lys Trp Leu Leu Asn Trp Gln Asn Phe
225 230 235 240

Arg Arg Phe Tyr Leu Tyr Val Leu Thr Glu Ser Val Lys Thr Ile Ile
245 250 255

Leu Lys His Arg His Ile Leu Leu Ser Asp Glu Met Lys Leu Lys Cys
260 265 270

Gln Leu Asn Glu Arg Asp Ile Ala Ser Ala Ala Thr Leu Pro Glu Leu
275 280 285

Asp Asp Ala Tyr Thr Arg Lys Val His Lys Phe Pro Ser Val Asn Ala
290 295 300

Leu Tyr Lys Trp Ser Ser Cys Ile Asn Tyr Ile Gln Asp Ile Glu Thr
305 310 315 320

Pro Met Val Phe Ile Asn Ala Lys Asp Asp Pro Leu Leu His Asp Thr
325 330 335

Leu Leu Asp Pro Ile Arg Lys Ile Ala Gly Ser Ser Arg Arg Met Ile
340 345 350

Tyr Val Glu Leu Ser His Gly Gly His Pro Arg Phe Phe Glu Arg Gly
355 360 365

Leu Ile Tyr Pro Asn Pro Val Thr Trp Ile Asp Arg Ala Val Ile Ser
370 375 380

Leu Val Xaa Gly Leu Leu Leu Ala His Asn Glu Lys Ser Tyr
385 390 395

<210> 27

<211> 1429

<212> DNA

<213> Ctenocephalides felis

<400> 27

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ccgctatata ataaatttag aaaataactt caataacatc gaataactga gcacaagatg 120
caaaaagacag cacaaataaa aaaataaatc cacaatttat aacaaaaaaa tatttcataa 180
attttttataa ataataatta taaatctaaa ttgggtttaat agctcttttc attatgtgca 240
agcaggagac cnccaaccaa gcttatcact gccctatcta tccaggtaac gggattgggg 300
tatatgagac ccctttcaaa gaatcttgga tgacctccat gagaaagttc tacgtagatc 360
attcttctag aagaaccagc aatttttctt atagggtcta gaagcgtatc atggagtaga 420
ggatcatctt tagcatttat gaacaccatt ggagtttcaa tgtcctggat gtagtttatg 480
caggaactcc atttgtacaa agcgtttaca gatggaaact tgtgaacttt tctcgtatag 540
gcgctatcca attccggcaa agtggctgcc gatgctatat ctctctcatt caattggcat 600
tttaatttca tttcatcgga caggagaata tgtctgtgtt tcaaaattat tgtctttaca 660
ctttctgtta aaacatacaa gtagaaacga cggaaatttt gcccaattcag tagccatttc 720
gtaccctcaa tggcgttgta tccttggcat attgaaattc ctccaattat attaccattt 780
ttaatttttg tcttttcacc aagatatttg gtgatgatat tgccctctta actgtagccc 840
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tcatcggtat gaccataact gaaatttcta gagttagtga caggcaactcc agataaggca 960
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cgaatgtaga ccgactccga ggagttactt atgccagggc aactgccag agttacctca 1080
tcttcatggt tatccggatt aagagctttg tatagatcgt aagtgagcgt cgacccatca 1140
gccagtgaca ggtacacctt ctctccgagt ggcagtgggc acttgacgag gcccaactatg 1200
ctgtgcacga tcgtctgcac gtgcccgtg aatcccaga gtctaggagg cacataaggc 1260
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atttttaggcg ttcccgggtg tgtatttaca tttaaaattc taaataaaaat gcacaaaatc 1380
acagcaataa ccgctaaaag agccggagac atcacgctca cacaaaaac 1429

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<210> 28

<211> 1194

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (1)..(1194)

<400> 28

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Met Ser Pro Ala Leu Leu Ala Val Ile Ala Val Ile Leu Cys Ile Leu
1 5 10 15

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ttt aga att tta aat gta aat aca caa ccg gga acg cct aaa ata tgg 96
Phe Arg Ile Leu Asn Val Asn Thr Gln Pro Gly Thr Pro Lys Ile Trp
20 25 30

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tgc aaa gat gag acg ttt ctt gag gcc att tac aaa att gct ccg ctt 144
Cys Lys Asp Glu Thr Phe Leu Glu Ala Ile Tyr Lys Ile Ala Pro Leu
35 40 45

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tta cga gag cct tat gtg cct cct aga ctc tgg gga ttc agc ggg cac 192

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Leu Arg Glu Pro Tyr Val Pro Pro Arg Leu Trp Gly Phe Ser Gly His	
50 55 60	
gtg cag acg atc gtg cac agc ata gtg ggc cgc gtc aag tgc cca ctg	240
Val Gln Thr Ile Val His Ser Ile Val Gly Arg Val Lys Cys Pro Leu	
65 70 75 80	
cca ctc gga gag agg gtg tac ctg tca ctg gct gat ggg tcg acg ctc	288
Pro Leu Gly Glu Arg Val Tyr Leu Ser Leu Ala Asp Gly Ser Thr Leu	
85 90 95	
act tac gat cta tac aaa gct ctt aat ccg gat aaa cat gaa gat gag	336
Thr Tyr Asp Leu Tyr Lys Ala Leu Asn Pro Asp Lys His Glu Asp Glu	
100 105 110	
gta act ctg gca gtg tgc cct ggc ata agt aac tcc tcg gag tcg gtc	384
Val Thr Leu Ala Val Cys Pro Gly Ile Ser Asn Ser Ser Glu Ser Val	
115 120 125	
tac att cgc aca ttt gtc cat tac gca caa tat tac gga tac aga tgt	432
Tyr Ile Arg Thr Phe Val His Tyr Ala Gln Tyr Tyr Gly Tyr Arg Cys	
130 135 140	
gcc gta ctt aat cat att ggt gcc tta tct gga gtg cct gtc act aac	480
Ala Val Leu Asn His Ile Gly Ala Leu Ser Gly Val Pro Val Thr Asn	
145 150 155 160	
tct aga aat ttc agt tat ggt cat acc gat gat tat aat gaa atg att	528
Ser Arg Asn Phe Ser Tyr Gly His Thr Asp Asp Tyr Asn Glu Met Ile	
165 170 175	
cga cat ctg caa tca cag ttt cct cct tct aaa ata att tgt gtg ggc	576
Arg His Leu Gln Ser Gln Phe Pro Pro Ser Lys Ile Ile Cys Val Gly	
180 185 190	
tac agt tta aga ggc aat atc atc acc aaa tat ctt ggt gaa aag aca	624
Tyr Ser Leu Arg Gly Asn Ile Ile Thr Lys Tyr Leu Gly Glu Lys Thr	
195 200 205	
aaa att aaa aat ggt aat ata att gga gga att tca ata tgc caa gga	672
Lys Ile Lys Asn Gly Asn Ile Ile Gly Gly Ile Ser Ile Cys Gln Gly	
210 215 220	
tac aac gcc att gag ggt acg aaa tgg cta ctg aat tgg caa aat ttc	720
Tyr Asn Ala Ile Glu Gly Thr Lys Trp Leu Leu Asn Trp Gln Asn Phe	
225 230 235 240	
cgt cgt ttc tac ttg tat gtt tta aca gaa agt gta aag aca ata att	768

Arg Arg Phe Tyr Leu Tyr Val Leu Thr Glu Ser Val Lys Thr Ile Ile
245 250 255

ttg aaa cac aga cat att ctc ctg tcc gat gaa atg aaa tta aaa tgc 816
Leu Lys His Arg His Ile Leu Leu Ser Asp Glu Met Lys Leu Lys Cys
260 265 270

caa ttg aat gag aga gat ata gca tcg gca gcc act ttg ccg gaa ttg 864
Gln Leu Asn Glu Arg Asp Ile Ala Ser Ala Ala Thr Leu Pro Glu Leu
275 280 285

gat gac gcc tat acg aga aaa gtt cac aag ttt cca tct gta aac gct 912
Asp Asp Ala Tyr Thr Arg Lys Val His Lys Phe Pro Ser Val Asn Ala
290 295 300

ttg tac aaa tgg agt tcc tgc ata aac tac atc cag gac att gaa act 960
Leu Tyr Lys Trp Ser Ser Cys Ile Asn Tyr Ile Gln Asp Ile Glu Thr
305 310 315 320

cca atg gtg ttc ata aat gct aaa gat gat cct cta ctc cat gat acg 1008
Pro Met Val Phe Ile Asn Ala Lys Asp Asp Pro Leu Leu His Asp Thr
325 330 335

ctt cta gac cct ata aga aaa att gct ggt tct tct aga aga atg atc 1056
Leu Leu Asp Pro Ile Arg Lys Ile Ala Gly Ser Ser Arg Arg Met Ile
340 345 350

tac gta gaa ctt tct cat gga ggt cat cca aga ttc ttt gaa agg ggt 1104
Tyr Val Glu Leu Ser His Gly Gly His Pro Arg Phe Phe Glu Arg Gly
355 360 365

ctc ata tac ccc aat ccc gtt acc tgg ata gat agg gca gtg ata agc 1152
Leu Ile Tyr Pro Asn Pro Val Thr Trp Ile Asp Arg Ala Val Ile Ser
370 375 380

ttg gtt ggn ggt ctc ctg ctt gca cat aat gaa aag agc tat 1194
Leu Val Xaa Gly Leu Leu Leu Ala His Asn Glu Lys Ser Tyr
385 390 395

<210> 29
<211> 398
<212> PRT
<213> Ctenocephalides felis

<400> 29
Met Ser Pro Ala Leu Leu Ala Val Ile Ala Val Ile Leu Cys Ile Leu
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Phe Arg Ile Leu Asn Val Asn Thr Gln Pro Gly Thr Pro Lys Ile Trp
20 25 30

Cys Lys Asp Glu Thr Phe Leu Glu Ala Ile Tyr Lys Ile Ala Pro Leu
35 40 45

Leu Arg Glu Pro Tyr Val Pro Pro Arg Leu Trp Gly Phe Ser Gly His
50 55 60

Val Gln Thr Ile Val His Ser Ile Val Gly Arg Val Lys Cys Pro Leu
65 70 75 80

Pro Leu Gly Glu Arg Val Tyr Leu Ser Leu Ala Asp Gly Ser Thr Leu
85 90 95

Thr Tyr Asp Leu Tyr Lys Ala Leu Asn Pro Asp Lys His Glu Asp Glu
100 105 110

Val Thr Leu Ala Val Cys Pro Gly Ile Ser Asn Ser Ser Glu Ser Val
115 120 125

Tyr Ile Arg Thr Phe Val His Tyr Ala Gln Tyr Tyr Gly Tyr Arg Cys
130 135 140

Ala Val Leu Asn His Ile Gly Ala Leu Ser Gly Val Pro Val Thr Asn
145 150 155 160

Ser Arg Asn Phe Ser Tyr Gly His Thr Asp Asp Tyr Asn Glu Met Ile
165 170 175

Arg His Leu Gln Ser Gln Phe Pro Pro Ser Lys Ile Ile Cys Val Gly
180 185 190

Tyr Ser Leu Arg Gly Asn Ile Ile Thr Lys Tyr Leu Gly Glu Lys Thr
195 200 205

Lys Ile Lys Asn Gly Asn Ile Ile Gly Gly Ile Ser Ile Cys Gln Gly
210 215 220

Tyr Asn Ala Ile Glu Gly Thr Lys Trp Leu Leu Asn Trp Gln Asn Phe
225 230 235 240

Arg Arg Phe Tyr Leu Tyr Val Leu Thr Glu Ser Val Lys Thr Ile Ile
245 250 255

Leu Lys His Arg His Ile Leu Leu Ser Asp Glu Met Lys Leu Lys Cys
260 265 270

Gln Leu Asn Glu Arg Asp Ile Ala Ser Ala Ala Thr Leu Pro Glu Leu
275 280 285

Asp Asp Ala Tyr Thr Arg Lys Val His Lys Phe Pro Ser Val Asn Ala
290 295 300

Leu Tyr Lys Trp Ser Ser Cys Ile Asn Tyr Ile Gln Asp Ile Glu Thr
305 310 315 320

Pro Met Val Phe Ile Asn Ala Lys Asp Asp Pro Leu Leu His Asp Thr
325 330 335

Leu Leu Asp Pro Ile Arg Lys Ile Ala Gly Ser Ser Arg Arg Met Ile
340 345 350

Tyr Val Glu Leu Ser His Gly Gly His Pro Arg Phe Phe Glu Arg Gly
355 360 365

Leu Ile Tyr Pro Asn Pro Val Thr Trp Ile Asp Arg Ala Val Ile Ser
370 375 380

Leu Val Xaa Gly Leu Leu Leu Ala His Asn Glu Lys Ser Tyr
385 390 395

<210> 30

<211> 1194

<212> DNA

<213> Ctenocephalides felis

<400> 30

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atgagaaaagt tctacgtaga tcattcttct agaagaacca gcaatttttc ttatagggtc 180
tagaagcgta tcatggagta gaggatcatc tttagcattt atgaacacca ttggagtttc 240
aatgtcctgg atgtagttaa tgcaggaact ccatttgtac aaagcgttta cagatggaaa 300
cttgtgaact tttctcgtat aggcgtcatc caattccggc aaagtggctg ccgatgctat 360
atctctctca ttcaattggc attttaattt catttcatcg gacaggagaa tatgtctgtg 420
tttcaaaatt attgtcttta cactttctgt taaaacatac aagtagaaac gacggaaatt 480
ttgccaatcc agtagccatt tcgtaccctc aatggcggtg tacccttggc atattgaaat 540
tcctccaatt atattacat ttttaatttt tgtcttttca ccaagatatt tggatgatgat 600
attgcctctt aaactgtagc ccacacaaat tatttttagaa ggaggaaact gtgattgcag 660
atgtcgaatc atttcattat aatcatcggg atgaccataa ctgaaatttc tagagttagt 720
gacaggcact ccagataagg caccaatatg attaagtacg gcacatctgt atccgtaata 780
ttgtgcgtaa tggacaaatg tgcgaaatga gaccgactcc gaggagtac ttatgccagg 840
gcacactgcc agagttacct catcttcatg tttatccgga ttaagagctt tgtatagatc 900

act tat gct ggt caa ttc gcc atg gag ggt ttc ctc aac cta caa tgg 433
 Thr Tyr Ala Gly Gln Phe Ala Met Glu Gly Phe Leu Asn Leu Gln Trp
 130 135 140

tct cgc tgg aag agg atc cta ttc acc cga atg att gcc atc ata cca 481
 Ser Arg Trp Lys Arg Ile Leu Phe Thr Arg Met Ile Ala Ile Ile Pro
 145 150 155 160

aca ttt ctg atg gca ttt ttc aat agc atc gaa gac cta tcg ggt atg 529
 Thr Phe Leu Met Ala Phe Phe Asn Ser Ile Glu Asp Leu Ser Gly Met
 165 170 175

aac gac ctt ctg aat gca gtg atg tcc tta caa cta cct ttt gcg acc 577
 Asn Asp Leu Leu Asn Ala Val Met Ser Leu Gln Leu Pro Phe Ala Thr
 180 185 190

cta ccg act ata gcg ttt acc agc aat gct gct atc atg gga gaa ttc 625
 Leu Pro Thr Ile Ala Phe Thr Ser Asn Ala Ala Ile Met Gly Glu Phe
 195 200 205

gtt aat gga gcg gtt aat tca gtc gtt gca atc ctt cta tcg att tta 673
 Val Asn Gly Ala Val Asn Ser Val Val Ala Ile Leu Leu Ser Ile Leu
 210 215 220

gta att gca atc aat att tat ttt gtg gtc gac cag gtt aat aat gga 721
 Val Ile Ala Ile Asn Ile Tyr Phe Val Val Asp Gln Val Asn Asn Gly
 225 230 235 240

gac ctg acg gaa ggc tat tta gct ctt ata gtg ata ttt gga at 765
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 245 250

<210> 32

<211> 254

<212> PRT

<213> Ctenocephalides felis

<400> 32

His Asn Leu Tyr Leu His Ser Ala Leu Val Lys Ser Arg Asp Val Asp
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 20 25 30

Glu Ala Ala Ile Ala Leu Phe Ile Ser Phe Ile Ile Asn Val Phe Val
 35 40 45

Val	Ala	Val	Phe	Ala	His	Gly	Leu	Phe	Lys	Thr	Thr	Asn	Gln	Glu	Ile
50						55						60			
Leu	Asp	Thr	Cys	Lys	Ser	Ser	Ala	Pro	Tyr	Ile	Arg	Glu	Glu	Ala	Leu
65					70					75					80
Ile	Val	Phe	Asn	Asn	Asn	Thr	Glu	Ile	Val	Glu	Ala	Asp	Leu	Tyr	Lys
			85						90					95	
Gly	Gly	Ile	Tyr	Leu	Gly	Cys	Ala	Phe	Gly	Ala	Ala	Ala	Val	Tyr	Ile
		100						105						110	
Trp	Ala	Val	Gly	Ile	Leu	Ala	Ala	Gly	Gln	Ser	Ser	Thr	Met	Thr	Gly
	115					120						125			
Thr	Tyr	Ala	Gly	Gln	Phe	Ala	Met	Glu	Gly	Phe	Leu	Asn	Leu	Gln	Trp
	130					135						140			
Ser	Arg	Trp	Lys	Arg	Ile	Leu	Phe	Thr	Arg	Met	Ile	Ala	Ile	Ile	Pro
145					150					155					160
Thr	Phe	Leu	Met	Ala	Phe	Phe	Asn	Ser	Ile	Glu	Asp	Leu	Ser	Gly	Met
			165						170					175	
Asn	Asp	Leu	Leu	Asn	Ala	Val	Met	Ser	Leu	Gln	Leu	Pro	Phe	Ala	Thr
		180						185						190	
Leu	Pro	Thr	Ile	Ala	Phe	Thr	Ser	Asn	Ala	Ala	Ile	Met	Gly	Glu	Phe
		195						200				205			
Val	Asn	Gly	Ala	Val	Asn	Ser	Val	Val	Ala	Ile	Leu	Leu	Ser	Ile	Leu
	210					215					220				
Val	Ile	Ala	Ile	Asn	Ile	Tyr	Phe	Val	Val	Asp	Gln	Val	Asn	Asn	Gly
225				230						235					240
Asp	Leu	Thr	Glu	Gly	Tyr	Leu	Ala	Leu	Ile	Val	Ile	Phe	Gly		
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<210> 33
 <211> 765
 <212> DNA
 <213> Ctenocephalides felis
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gaattaaccg ctccattaac gaattctccc atgatagcag cattgctggg aaacgctata 180
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cccgataggt cttcgatgct attgaaaaat gccatcagaa atgttggtat gatggcaatc 300
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gcgaattgac cagcataagt cccagtcatt gtagaacttt gaccggctgc caatattccg 420
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atatatgggg ctgaactttt gcaagtgtct aagatttctt ggtagtagt tttaaataaa 600
ccatgtgcaa acacagcaac tacgaacaca ttattatga aagatataaa tagtgcaatc 660
gctgcttcga taaagaaata ataattagcg tctctcactt tctcggggtt tctcctgtcg 720
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<210> 34
 <211> 762
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (1)..(762)

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<400> 34
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His Asn Leu Tyr Leu His Ser Ala Leu Val Lys Ser Arg Asp Val Asp
  1             5             10            15

agg aga aac ccg gag aaa gtg aga gac gct aat tat tat ttc ttt atc 96
Arg Arg Asn Pro Glu Lys Val Arg Asp Ala Asn Tyr Tyr Phe Phe Ile
      20            25            30

gaa gca gcg att gca cta ttt ata tct ttc ata ata aat gtg ttc gta 144
Glu Ala Ala Ile Ala Leu Phe Ile Ser Phe Ile Ile Asn Val Phe Val
      35            40            45

gtt gct gtg ttt gca cat ggt tta ttt aaa act act aac caa gaa atc 192
Val Ala Val Phe Ala His Gly Leu Phe Lys Thr Thr Asn Gln Glu Ile
      50            55            60

tta gac act tgc aaa agt tca gcc cca tat atc cga gag gaa gcc cta 240
Leu Asp Thr Cys Lys Ser Ser Ala Pro Tyr Ile Arg Glu Glu Ala Leu
      65            70            75            80

ata gtc ttt aac aac aat act gaa att gta gaa gcc gat ttg tac aaa 288
Ile Val Phe Asn Asn Asn Thr Glu Ile Val Glu Ala Asp Leu Tyr Lys
      85            90            95

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<210> 36
 <211> 762
 <212> DNA
 <213> Ctenocephalides felis

<400> 36
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 attaacgct ccattaacga attctcccat gatagcagca ttgctggtaa acgctatagt 180
 cggtagggtc gcaaaaggta gttgtaagga catcactgca ttcagaaggc cgttcatacc 240
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 tcgggtgaat aggatcctct tccagcgaga ccattgtagg ttgaggaaac cctccatggc 360
 gaattgacca gcataagtcc cagtcattgt agaactttga ccggctgcca atattccgac 420
 agcccaaatg tacacggctg cagccccgaa ggcacagcct aaataaatgc ctcttttga 480
 caaatcggtc tctacaattt cagtattgtt gttaaagact attagggctt cctctcggat 540
 atatggggct gaacttttgc aagtgtctaa gatttcttgg ttagtagttt taaataaacc 600
 atgtgcaaac acagcaacta cgaacacatt tattatgaaa gatataaata gtgcaatcgc 660
 tgcttcgata aagaaataat aattagcgtc tctcactttc tccgggtttc tcctgtcgac 720
 atctctcgac tttacaaggg cactatgcaa atacaaattg tg 762

<210> 37
 <211> 604
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (26)..(430)

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 Met Arg Ser Phe Leu Leu Ala Thr Phe
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 gca gcc ttg ttg gtt tgc tct gtt ttt gct aga cct caa gaa gat aaa 100
 Ala Ala Leu Leu Val Cys Ser Val Phe Ala Arg Pro Gln Glu Asp Lys
 10 15 20 25
 tat act agc aaa ttt gat aac atc aat tta gat gaa att ttg caa agc 148
 Tyr Thr Ser Lys Phe Asp Asn Ile Asn Leu Asp Glu Ile Leu Gln Ser
 30 35 40
 aat aga ttg ctc aac aac tat gta aac tgc ctt ctc gac aaa ggc agc 196
 Asn Arg Leu Leu Asn Asn Tyr Val Asn Cys Leu Leu Asp Lys Gly Ser
 45 50 55

tgc aca gca gaa gga aaa gaa ttg aaa aaa gtc tta cct gat gcc tta 244
Cys Thr Ala Glu Gly Lys Glu Leu Lys Lys Val Leu Pro Asp Ala Leu
60 65 70

tcc aac gag tgc gct aaa tgt agc gag aaa caa aga gaa gga gct gag 292
Ser Asn Glu Cys Ala Lys Cys Ser Glu Lys Gln Arg Glu Gly Ala Glu
75 80 85

aaa gta atc aga ttt ttc gtc aac aac aaa cca gaa gag tgg aag aaa 340
Lys Val Ile Arg Phe Phe Val Asn Asn Lys Pro Glu Glu Trp Lys Lys
90 95 100 105

ctt tct gca gtt tac gat cca acc ggc gag tac aca aag aaa tat agc 388
Leu Ser Ala Val Tyr Asp Pro Thr Gly Glu Tyr Thr Lys Lys Tyr Ser
110 115 120

acc caa att gaa caa gtg aag aga ggc gaa ccc gtt aca gtt 430
Thr Gln Ile Glu Gln Val Lys Arg Gly Glu Pro Val Thr Val
125 130 135

taaatttcca aaaagagatt tctcaaaata ttggcaagtc atttaggaat cgtagtgtta 490

ttttcacctg tagatatattc tgtttttaat aataaaaaaa atgtagttgt aggacaaata 550

gagcatatatt aaataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 604

<210> 38

<211> 135

<212> PRT

<213> Ctenocephalides felis

<400> 38

Met Arg Ser Phe Leu Leu Ala Thr Phe Ala Ala Leu Leu Val Cys Ser
1 5 10 15

Val Phe Ala Arg Pro Gln Glu Asp Lys Tyr Thr Ser Lys Phe Asp Asn
20 25 30

Ile Asn Leu Asp Glu Ile Leu Gln Ser Asn Arg Leu Leu Asn Asn Tyr
35 40 45

Val Asn Cys Leu Leu Asp Lys Gly Ser Cys Thr Ala Glu Gly Lys Glu
50 55 60

Leu Lys Lys Val Leu Pro Asp Ala Leu Ser Asn Glu Cys Ala Lys Cys
65 70 75 80

Ser Glu Lys Gln Arg Glu Gly Ala Glu Lys Val Ile Arg Phe Phe Val
85 90 95

Asn Asn Lys Pro Glu Glu Trp Lys Lys Leu Ser Ala Val Tyr Asp Pro
100 105 110

Thr Gly Glu Tyr Thr Lys Lys Tyr Ser Thr Gln Ile Glu Gln Val Lys
115 120 125

Arg Gly Glu Pro Val Thr Val
130 135

<210> 39
<211> 604
<212> DNA
<213> Ctenocephalides felis

<400> 39
 tttttttttt tttttttttt tttttttttt tttttttttt atttaaatat gctctatttg 60
 tcctacaact acattttttt tattattaaa aacagaaata tctacagggtg aaaataacac 120
 tacgattcct aaatgacttg ccaatatatt gagaaatctc tttttggaaa tttaaactgt 180
 aacgggttcg cctctcttca cttgttcaat ttgggtgcta tatttctttg tgtactcgcc 240
 gggttgatcg taaactgcag aaagtcttct ccactcttct gggttggtgt tgacgaaaaa 300
 tctgattact ttctcagctc cttctctttg tttctcgcta catttagcgc actcgttgga 360
 taaggcatca ggtaagactt ttttcaattc ttttccttct gctgtgcagc tgcctttgtc 420
 gagaaggcag ttacatagtg tgttgagcaa tctattgctt tgcaaaattt catctaaatt 480
 gatgttatca aatttgctag tatatttatc ttcttgaggt ctagcaaaaa cagagcaaac 540
 caacaaggct gcgaatgtag cgaggaggaa ggatctcatt ttgatctgta agtaagagta 600
 ttga 604

<210> 40
<211> 405
<212> DNA
<213> Ctenocephalides felis

<220>
<221> CDS
<222> (1)..(405)

<400> 40
 atg aga tcc ttc ctc ctc gct aca ttc gca gcc ttg ttg gtt tgc tct 48
 Met Arg Ser Phe Leu Leu Ala Thr Phe Ala Ala Leu Leu Val Cys Ser
 1 5 10 15

Val Asn Cys Leu Leu Asp Lys Gly Ser Cys Thr Ala Glu Gly Lys Glu
50 55 60

Leu Lys Lys Val Leu Pro Asp Ala Leu Ser Asn Glu Cys Ala Lys Cys
65 70 75 80

Ser Glu Lys Gln Arg Glu Gly Ala Glu Lys Val Ile Arg Phe Phe Val
85 90 95

Asn Asn Lys Pro Glu Glu Trp Lys Lys Leu Ser Ala Val Tyr Asp Pro
100 105 110

Thr Gly Glu Tyr Thr Lys Lys Tyr Ser Thr Gln Ile Glu Gln Val Lys
115 120 125

Arg Gly Glu Pro Val Thr Val
130 135

<210> 42
<211> 405
<212> DNA
<213> Ctenocephalides felis

<400> 42
aactgtaacg gggtcgccctc tcttcacttg ttcaatttgg gtgctatatt tctttgtgta 60
ctcgccggtt ggatcgtaaa ctgcagaaaag tttcttccac tcttctgggtt tgttggtgac 120
gaaaaatctg attactttct cagctccttc tctttgttgc tcgctacatt tagcgccactc 180
gttgataaag gcatcaggta agactttttt caattctttt ccttctgctg tgcagctgcc 240
tttgtcgaga aggcatgta catagttggt gagcaatcta ttgctttgca aaatttcatac 300
taaattgatg ttatcaaatt tgctagtata tttatcttct tgaggtctag caaaaacaga 360
gcaaaccaac aaggctgcga atgtagcgag gaggaaggat ctcat 405

<210> 43
<211> 1227
<212> DNA
<213> Ctenocephalides felis

<220>
<221> CDS
<222> (312)..(1049)

<400> 43
gcgttttcta aaacaaactt ctttataatg taaataaata gaaatgaaat gtgaataaat 60
ttgagtatga aaacaaatta atcaacaaca caatttaatt tccttatttc atttataatg 120

Ser Met Leu Pro Ala Ala Leu Phe Thr Gly Leu Cys Cys Leu Leu Val
160 165 170

ggg ggt atc att cag ata ttc act cat tca acc att ttt gaa tta gtg 878
Gly Gly Ile Ile Gln Ile Phe Thr His Ser Thr Ile Phe Glu Leu Val
175 180 185

tta tgc agt ttt ggt gca cta ata ttc agc ttg ttt ttg ctt tat gac 926
Leu Cys Ser Phe Gly Ala Leu Ile Phe Ser Leu Phe Leu Leu Tyr Asp
190 195 200 205

acg cat gtt atg atg acg aca tta tca cca gaa gag tat att ttg gcc 974
Thr His Val Met Met Thr Thr Leu Ser Pro Glu Glu Tyr Ile Leu Ala
210 215 220

aca att aac ttg tac tta gat att gtc aat cta ttc ata tat att tta 1022
Thr Ile Asn Leu Tyr Leu Asp Ile Val Asn Leu Phe Ile Tyr Ile Leu
225 230 235

aga att ctg caa gca gca gac agg ggt taaatcatct gtgataaaat 1069
Arg Ile Leu Gln Ala Ala Asp Arg Gly
240 245

ataaatgggt caaaattcta tattgtatta tttatatatt taaaaatgcc ttgcttattt 1129
atattgtatg tttccattta ttgtatatag tttatatttgt tatttttatgg ccaagattaa 1189
taaattcgaa attaatatgc aaaaaaaaaa aaaaaaaaaa 1227

<210> 44
<211> 246
<212> PRT
<213> Ctenocephalides felis

<400> 44
Met Ala Thr Val Pro Leu Met Phe Ala Glu Asp Asp Leu Glu Gly Gly
1 5 10 15

Gly Lys Glu Gly Ser Ile Glu Asn Asp Phe Ala Tyr Asn Asn Asn Val
20 25 30

Ile Asn Ala Ser Val Arg Val Arg Leu Gly Phe Ile Arg Lys Val Tyr
35 40 45

Gly Leu Leu Thr Val Gln Leu Leu Leu Ser Leu Leu Val Gly Ile Ala
50 55 60

Cys Gln Ile Glu Pro Val Gln Gly Ile Val Lys Ala Asn Asp Trp Leu
65 70 75 80

Val Leu Val Cys Met Ile Ser Ser Ile Gly Val Leu Ile Ala Leu His
85 90 95

Ile Lys Arg Lys Glu Thr Pro Thr Asn Phe Ile Leu Leu Thr Ile Phe
100 105 110

Thr Ile Thr Asn Ser Ile Ser Val Gly Val Leu Val Thr His Phe Lys
115 120 125

Ala Ser Leu Val Leu Gln Ala Ile Ala Ile Thr Leu Cys Val Val Ile
130 135 140

Gly Ile Thr Leu Phe Thr Leu Gln Asn Lys Leu Asp Leu Ser Met Leu
145 150 155 160

Pro Ala Ala Leu Phe Thr Gly Leu Cys Cys Leu Leu Val Gly Gly Ile
165 170 175

Ile Gln Ile Phe Thr His Ser Thr Ile Phe Glu Leu Val Leu Cys Ser
180 185 190

Phe Gly Ala Leu Ile Phe Ser Leu Phe Leu Leu Tyr Asp Thr His Val
195 200 205

Met Met Thr Thr Leu Ser Pro Glu Glu Tyr Ile Leu Ala Thr Ile Asn
210 215 220

Leu Tyr Leu Asp Ile Val Asn Leu Phe Ile Tyr Ile Leu Arg Ile Leu
225 230 235 240

Gln Ala Ala Asp Arg Gly
245

<210> 45
<211> 1227
<212> DNA
<213> Ctenocephalides felis

<400> 45
tttttttttt ttttttttgc atattaattt cgaatttatt aatcttggcc ataaaataac 60
aaaataaaact atatacaata aatggaaaca tacaatataa ataagcaagg cattttttaa 120
tatataaata atacaatata gaattttgaa ccatttatat tttatcacag atgatttaac 180
ccctgtctgc tgcttgcaga attcttaaaa tatatatgaa tagattgaca atatctaagt 240

gta tta gtc tgc atg atc agt agc att ggt gtg ctg att gct ctt cac	288
Val Leu Val Cys Met Ile Ser Ser Ile Gly Val Leu Ile Ala Leu His	
85 90 95	
atc aag aga aag gaa aca cca act aat ttt att ctt tta aca att ttc	336
Ile Lys Arg Lys Glu Thr Pro Thr Asn Phe Ile Leu Leu Thr Ile Phe	
100 105 110	
aca att aca aac tcc atc agt gtg ggt gtg cta gta aca cat ttt aaa	384
Thr Ile Thr Asn Ser Ile Ser Val Gly Val Leu Val Thr His Phe Lys	
115 120 125	
gct agt tta gta ctt caa gct att gca att act ttg tgt gtt gtt att	432
Ala Ser Leu Val Leu Gln Ala Ile Ala Ile Thr Leu Cys Val Val Ile	
130 135 140	
ggg ata aca ctc ttt aca tta caa aac aaa ctg gat tta tca atg ctc	480
Gly Ile Thr Leu Phe Thr Leu Gln Asn Lys Leu Asp Leu Ser Met Leu	
145 150 155 160	
cca gca gca ttg ttt act gga ctt tgc tgt tta ttg gta ggt ggt atc	528
Pro Ala Ala Leu Phe Thr Gly Leu Cys Cys Leu Leu Val Gly Gly Ile	
165 170 175	
att cag ata ttc act cat tca acc att ttt gaa tta gtg tta tgc agt	576
Ile Gln Ile Phe Thr His Ser Thr Ile Phe Glu Leu Val Leu Cys Ser	
180 185 190	
ttt ggt gca cta ata ttc agc ttg ttt ttg ctt tat gac acg cat gtt	624
Phe Gly Ala Leu Ile Phe Ser Leu Phe Leu Leu Tyr Asp Thr His Val	
195 200 205	
atg atg acg aca tta tca cca gaa gag tat att ttg gcc aca att aac	672
Met Met Thr Thr Leu Ser Pro Glu Glu Tyr Ile Leu Ala Thr Ile Asn	
210 215 220	
ttg tac tta gat att gtc aat cta ttc ata tat att tta aga att ctg	720
Leu Tyr Leu Asp Ile Val Asn Leu Phe Ile Tyr Ile Leu Arg Ile Leu	
225 230 235 240	
caa gca gca gac agg ggt	738
Gln Ala Ala Asp Arg Gly	
245	

<210> 47

<211> 246

Gln Ala Ala Asp Arg Gly
245

<210> 48
<211> 738
<212> DNA
<213> Ctenocephalides felis

<400> 48
accctgtct gctgcttgca gaattcttaa aatatatatg aatagattga caatatctaa 60
gtacaagtta attgtggcca aaatatactc ttctggtgat aatgtcgtca tcataacatg 120
cgtgtcataa agcaaaaaca agctgaatat tagtgcacca aaactgcata aactaattc 180
aaaaatggtt gaatgagtga atatctgaat gataccacct accaataaac agcaaagtcc 240
agtaaacaat gctgctggga gcattgataa atccagtttg ttttgtaatg taaagagtgt 300
tataccaata acaacacaca aagtaattgc aatagcttga agtactaaac tagctttaaa 360
atgtgttact agcacaccca cactgatgga gtttgtaatt gtgaaaattg ttaaagaat 420
aaaattagtt ggtgtttcct ttctcttgat gtgaagagca atcagcacac caatgctact 480
gatcatgcag actaatacga gccagtcatt tgctttaaca attccttgta caggctcaat 540
ttggcaggct atgcccacca gcaagctcaa taacaactga actgtaagta gtccatagac 600
ttttcgaatg aatccaagtc tcacacgaac agatgcatta ataacgttat tgttatatgc 660
aaagtcattc tctattgaac cttcttttcc accaccttct aggtcatctt cagcaaacat 720
aagggtacg gttgcat 738

<210> 49
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 49
gcggatccta tgctgaattg caagaacctt g 31

<210> 50
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 50
caggtaccct cttttagaag caccgggtccc 30

<210> 51
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 51
cgggatcctg ctgacaggaa ttgcccac 29

<210> 52
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 52
catggtaccc ctggtttaag ccttacttag c 31

<210> 53
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 53
ccattattaa cctgggtcgac cac 23

<210> 54
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 54

ggaaacagta tgaccatg

18

<210> 55

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 55

cgctatagtc ggtagggtcg c

21

<210> 56

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 56

aattaaccct cactaaaggg

20

<210> 57

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 57

caaaactggt ctccccgctc

20

<210> 58
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 58
taatacgact cactataggg 20

<210> 59
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 59
ggttcgctc tcttcacttg 20

<210> 60
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 60
cggttgatc gtaaactgca g 21

<210> 61
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 61
 cgcggatcca gaagataaat atactagcaa atttgataac

40

<210> 62
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 62
 gaggaattcc tcttttttggga aatttaaact gtaacgg

37

<210> 63
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 63
 accaggncca ataataatttc taattgtttc aatacaaaact ataaanggta ttaaaattat 60
 tggagttcct tgaggcacta gatgactaaa tatatgggta taattattaa ttcatacctan 120
 taatataaat cttaatcata aagggaagtct taatctttaa gttaaagtta aatgactagt 180
 tcttgtanaa atgtaattaa ataatacctaa aaaattatta aataaaataa atgaaaataa 240
 tctaataaat ataaaagtgc ttcctatagg attataatttt ataagtaatt taaattcatt 300
 atgaagtgtt ataataattt ttaatacaaat tatgttgtat cgggacggaa ttattcanaa 360
 tatatttggga ataaataata ntcctaatac ctgccgggnn tttgtntnnt ctctccnnct 420
 ntccannctn atcnctncc cntcnnnnt ganatnctn tnnnnnctnt ctccccctn 480
 taenctgnnn ctccnnnttc 500

<210> 64
 <211> 164
 <212> DNA
 <213> Ctenocephalides felis

<400> 64
 gcagctaaca agaattgtatt aactgcattc caaagaagaa attattctga tgaattatct 60
 ttgacatttg ctgctgccaa taaggatttc tatgactcag tagatgtaaa gcagggtggat 120
 gttccatctt tcagtgggtgc ttttgggtatc ttagctaaac acgt 164

<210> 65
 <211> 337
 <212> DNA

<213> Ctenocephalides felis

<400> 65

cgcttccagt tgacgtttcg tctcatgcaa taattaatta aacttgtttg ttagagggtgc 60
aaaataaaat taaattaaaa tgactgcctg gagacaagct ggtttaaact acattaactt 120
ttcaacaatt gctgcccga tgggccgcca agctttgaaa tctgatctaa aaaatgaggc 180
tttgaaacgg gacgtatcta gcattaaatt cacaccctgg aaggacggaa aagcgatcac 240
tggaaaaccg gaataaaatc aaatactcat ctataaaagt gaaaccaagt aatcacaaga 300
tggaataata gacaattcac tcaaattaat aatgtgt 337

<210> 66

<211> 201

<212> DNA

<213> Ctenocephalides felis

<400> 66

acaggccatt tatgtgccag ctgatgactt gacagatcct gccctgccca ctacattcgc 60
tcaattggac gccaccactg tattgtcccg tgccattgct gaattaggta tctaccagc 120
tgtggatcct ttggattota catcccgtat tatggacccc aacatcattg gagctgaaca 180
ttacaacatt gcccggtggcg t 201

<210> 67

<211> 179

<212> DNA

<213> Ctenocephalides felis

<400> 67

accttgagac ttttggcagc taacaagaat gtattaactg cattccaaag aagaaattat 60
tctgatgaat tatctttgac atttgtgtgt gccataagg tattctatga ctcatgat 120
gtaaagcagg tggatgttcc atctttcagt ggtgttttg gtatcttagc taaacacgt 179

<210> 68

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 68

acaccatcat tgtatcagcc actgcttctg atgctgcccc tcttcaatat cttgctccat 60
actctggatg tgotatgggt gaattcttcc gtgacaatgg aaaacatgct ttgatcatct 120
atgatgattt atocaaacaa gctgttgctt atcgtcaa atgtctattg ttacgtcgtc 180
caccaggctcg tgaggcttat ccagggtgatg tcttctacct tcactcacgt ctacttgaac 240
gtgcccgtaa aatgtctgaa gctcatggag gtggctcttt gactgctttg ccagttattg 300
aaacacaagc tgggtgacgta tcagcttata ttccaactaa tgtcatttcc attactgatg 360
gcaaatcttc ttggaaactg aattgttcta caagggtatt cgaccagcca tcaatgtagg 420
tttatctgta tctcgtgtag gtctgctgca caaaccaaag ccatgaaaca ggttgccggg 480

tcatgaaact ggaattagct

500

<210> 69

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 69

tacataatgg catctttgaa gttaaataatc gtaaccagga gcttaagctc atctgcagtc 60
gcgtctcaaa tggttaaacc acccgtaaa gtatatggaa ttgagggtag atacgcaact 120
gccttgact caggagccag taagaataaa gtactcgacg ccgtcgagaa agatttggtc 180
aaaatacaga ataacttaaa gaccgatgta aaattccgag atttcattgc caatccaaca 240
ttcaagcgct caattaaatc aaatgcattg aaggaagcca gcagcaagct gcaaatggct 300
ccagctactt ctaacttggt ggagttactt gctgagaatg gacgtttaaa taaactggaa 360
ggtgttatca acgcttataa agttatgatg tctgctcatc gtggagaggt tccatgtgaa 420
gttacaacag ctaaaccctt agatgagaat caacgaaaac aacttgaaag cctttaagag 480
gattcttaaa acccaaagaa aacttattac tacccttaag taatcctcat cttggtggaa 540
tgtcgtca 549

<210> 70

<211> 238

<212> DNA

<213> Ctenocephalides felis

<400> 70

actgctgac cctgtccctc gccccagcat aataaccatta ggttgaaacg tccatttcct 60
gcgtccacca gattgcgagt gtaacggtaa cgatcaaatt tggcataccg cctccactcg 120
gctggatccg acttgtagct cagcatcaga tgattgacca actcgatgtc tacatcatct 180
tcagcaaatg ctctgtgcaa ctgttcaact agatctttta gagaagtaac accttgggt 238

<210> 71

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 71

actaatgaca aggctggtgg tccccattat gtcttgcgct ggactactcc tcaatctatc 60
aaggagacat ttgttccaat cacatgtgtc gactatccat acatgagaga ataagctgcc 120
aaatcccccc caaagcacc acaccataac aataattcaa tggacactaa accaaagatg 180
cgtgttacaa atactctgtt caagatctcg atcataaaat ttgcacacag tccggttcac 240
ttttgatttc tgttattcag taactatttt atctttaccg cgcaattgga aaataacagg 300
tgaatcaaag aaattgattt tagtaattat ttttcttggt atataaataa aagaatatta 360
tagtaacatt ttgccattaa aaatattaat ttacctagg aagcaatatc aagtattcat 420
tcaagtcaaa tttgaagaca tttattaaaa atcgatgttg ccattttatt aaatagatta 480
tgaaaattat gggggtatta 500

<210> 72
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 72
 acatataata ttgataatat gcatagggcg gattttcagt gtctgtccat ttttctggtg 60
 tcggaacatc cttatcgaat aatggatttt cgggtttact ttcacatcc accgagtcaa 120
 aacctatcac gaactgaaga aacttggtga gttcaggatg cgattgtgga tcattcgtaa 180
 cttcaaataa tggcaaatag atatttgtaa gaatttcttg gaaattgttc atcagcttat 240
 ttaatttgaa aatatcgtat aatcgtggta tttgaataag ccagcgcaca ttatcactat 300
 aaacattaga ttctattgcc cattttgcaa gtttatccca ctcttcagga cttttacat 360
 aaattgaaag tctcaattcg caattttgat atttgctttc ttctaaatcc gaactaactt 420
 cattgataat tcttgcaaaa tattttccgt tcaagtagtt atcgggttta agaaacttct 480
 ctcaatctgc tttcaccaat 500

<210> 73
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 73
 actaattaat tttaaaaaat taaggataga aaccaacctg gcttaaacctg gtttgaactc 60
 agannatgta agaattaatg gtcgaacaga ccaaatttta aaacttctgc attttaaaat 120
 tatcttaatc caacatcgag gtcgcaatct attttgctga tatgttctct taaaaataat 180
 tacgctgtta tcccttaagt aacttaatct tttaatcata atttatggat caattattca 240
 attatttatg ttttaataaa aaaaaagttt tataaatttt cctatcacc ccaataaaata 300
 tattaatata aataaattta ataatttct taaaattaat ctatatattat atataaaact 360
 ttaaagggtc ttctcgtcct ttaataatat ttacgctttt taacataaaa attaaattct 420
 ataacaattt tattaagaca ggtaatatc attcaatcat tcattccagc ttcaattaaa 480
 aaactatgga ttatgctacc 500

<210> 74
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 74
 ccttatgata ttcataaata taaaccacag tnnntttttc ttgcactttg tgcaaaaacta 60
 tattccagtg ttgtctgcct ttgacacagc tcaacatttt gttgcatttt gcaatctttc 120
 actaatatct gccagtttg caacatcgaa aattgctttt acatagtcag ccctgacatt 180
 tttatattga aggtagtatg catgttccca gacgtcaatt ccaaatagtg gaaccagacc 240
 agtgggttgc tccaatggat cttgatttgc gcatgtagct atttgtaact ttttagcagt 300
 tttattataa gccagccatc cccatcctga gccttgaaca cctacagctg ctgtagacaa 360

agcagttttc atcttatcca tagatccaaa atcacattca atcattttct gtagctggtc 420
acttggttta ccccccttcg gggaaagggtt tttccaaaag atagaatgat tgatgtgcct 480
cctccattga atttcaatgc 500

<210> 75
<211> 348
<212> DNA
<213> Ctenocephalides felis

<400> 75
cagtgcgaa aagcaagtgc cattatcggt ctctccgtcg atttacgaaa ctacacttca 60
attccaaaaa ggataactgg gactcgcat cgcactcact acccaacgac tacgatttaa 120
ttagctaaag gccaaattaa agcttcaaga tgccgttcaa gccagtagaa aacccaaaat 180
gcccaaaatg cggcaaatca gtatatgccg ccgaagagcg gttgcccgtt ggacttaagt 240
ggcacaaaat gtgtttcaaa tgcggtatgt gcagcaaatt gttggactcc accaactgca 300
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<210> 76
<211> 451
<212> DNA
<213> Ctenocephalides felis

<400> 76
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atagtttttt tctatatattg aattttgatc gttgtattac tacgaatgtt gccttgagat 180
gtgcgttcta ttttgtagaa taaatatcat tcgtaatgaa ttaattcgcg ttttaagcct 240
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tagagaagct ttgcatgacg cgcaggtgaa gcagtcattg tgccaatggc gatcttcaaa 360
cgagatgaag cgagtgccac caattcctgt aatgggtttg gtgcaagccg tgcattctct 420
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<210> 77
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 77
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caataattct gcacaaacac cagaaaatcc ttacgtttat gatacagtaa cttctaatta 180
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agttcaacga ctgggtccga gccctcaact gaggaattgc atcaagaaat ggctatttgg 480
aaggcttaat gaaagactaa 500

<210> 78
<211> 550
<212> DNA
<213> Ctenocephalides felis

<400> 78
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ccgcgacgaa catccttact gcatcaagtg ctacgagagc gtcttttcca acacctgcga 180
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atgcataaga 550

<210> 79
<211> 550
<212> DNA
<213> Ctenocephalides felis

<400> 79
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gagtttccctt gcgacgattg ggcatcacac gacgaagatg cagatgatgt tacagtttgg 180
gaagataatt gggatgatga taatgttaaa gatgacttca gccagcaatt aaggtctcaa 240
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tgtaatttca aaaaacataa ttaataaact gattttttta atnttaaaaa aaaaaaaaaa 360
aaaaaaaaaa aaccctnngg gggggggccg gcccattc nccctatngg gagtcgnttc 420
aattcactgn ccngttttc acgtcngac tgggaaaccc tgcgttacc acttaattccc 480
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<210> 80
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 80
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 catttcgacc tgacagggtta ttggtgttg ctgccgttac aaattatctg gtagcgatgt 420
 gttagataat attgcatatg cactgagcata taatacagat catcaaacac aacttttaaat 480
 atatgctctg caatgatgtc 500

<210> 84

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 84

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 aagtttggtg tgtgtgtgct cttgtgcttt tgaagaagtt attactttct ctattcataa 300
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 ccctgatgct gctgaattct gtatcaatta cactgaaatc tccaagcttg attgggatat 420
 cgngttttaa tccactatca nncattttta taaaanttta tttaanattc acatcacaca 480
 naattaatta attggtaaat 500

<210> 85

<211> 413

<212> DNA

<213> Ctenocephalides felis

<400> 85

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 cggcaagttt atccttcaat ttttcatctt ccattggtga tttcatgttg aagcaagtaa 180
 gattctaacg agttcttagc agcaattgta gacttttgtt tctcatcttc atttctgtat 240
 ttctcagcat cgttaaccat ctttcaatg tcttcttgct aagacgacct ttgtcatttg 300
 taatggtgat tttattttcc ttgntgggtg atttttcaat tgctgtgaca ttaagaatac 360
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<210> 86

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 86

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tgatactata taactaattt atttaattta ggaagaggaa tttatgaaaa tattgaaaca 180
 aaaaactatt ttttattcaa gcataatatt taattattaa ttagatcgat aattaacaaa 240
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 caagttagtg acgccttcca 500

<210> 87

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 87

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 cttgccctaa ctttaacgat acacaacatg aactggcag aatcgctctt atgaagaaat 180
 agttgatttg ccacagaaac cagaagtttt acttattgat gttcgtcaac cggaggaatt 240
 ggagcaggaa ggaaaaattc cgacggctat aaacattcca ttacgtgaat tggaaaatgc 300
 totcaagaac atgtctcctg aagaattcaa aaccaaattc ggaagagata aaccaacatt 360
 cgatactgaa atcattttta gttgccgttc cggaaaacga gcaaaggaag ctatggaaac 420
 agcattggga ttgtntacaa gaaatcaaga tctacgaagg tagcttttta gaatgggcac 480
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 ccaactagtt 550

<210> 88

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 88

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 tctttaatta ttaatacatt ctactctaac aaagaaatct tcttgcgaga attgatctca 180
 aattcatcag atgcttttga taaaatccgc tatgaatccc ttactgatgc atctcgcttg 240
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 attattgaca caggcattgg catgacgaaa gctgatcttg tgaacaattt gggatcaatt 360
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 agcacaatga tgatgaacaa tcctttggaa tcttccgcag aggtccttac agtaagactg 540
 cacttgacc 549

<210> 89

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 89

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gggccacagc ctggtccaca agtacgagga catgcccggc ggaggcggag gcgcaaggca 180
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caacaagttc gaagggcacg acatgggaca gaacctggga cacaatttag gccacaatct 300
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ggaagcgcag agtcctggca attagcatag gacgtgtaaa tacgtgagtt agggacataa 420
attcaagtga ctgattagtg actgaacgat gttataaatg acaacgtgag tgcgaaaaca 480
aaacgtcttg acgaagaaat atcggttaag taaaaaaaaa acaacaaat gaaataacca 540
ggggtaaaaa 549
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<210> 90

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 90

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caacaaagga gagaacgcc catcggaatc accgaagggc aaaccgggca gacgaaacag 180
agctttacaa agaataaag aagagggtga agcactaatt aagtctctag gtggaacccc 240
tgaaattgaa ggcagaaggc gtactaggtc ttcactaaaa acgccagcaa cccccccagt 300
tacgccccca actccacga aaaaggcaaa atctacacca gcacccaaag gcacaaaggg 360
acgcgggagg ggaagaaaaa gtgaaaaggt ggaggaggcc gaagaaaagc aagaatcaac 420
agaacaagaa gacgaagtag acgaatcaa tgcacttact aaattcacct ccgaagacaa 480
ggccaagtag aacaaaatgt aaaacagaag accttcagaa gaaccgcaaa ctgatgactg 540
ttaatccga 549
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<210> 91

<211> 251

<212> DNA

<213> Ctenocephalides felis

<400> 91

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ctcatcagca gattgaaact caatctaata caggaataa acaccaagta tcatcatcta 120
acgctaccta cgttattgaa cgcccgaga aaacogttcg acgcgataat ctgttaactg 180
gcggtgaatt ttatgggtcaa aaagattcaa ggtatggtaa tttttctaata tgtgaacaaa 240
gtctaagaag t 251
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<210> 92

<211> 375

<212> DNA
 <213> Ctenocephalides felis

<400> 92
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 cgtctaataa ggacggacaa cggaacatat gtcaccgtc gcacatgcat tgctgagccg 180
 cctggtagtc gcggctgaag gctgcgggtg tctcgaagtt ctcggtgcaa ccatgctctt 240
 ctgttaatac aacaggacag ggattagggtg gattacaata agcgggcaaa ttatccgttt 300
 ttacttgctg atgattcatt gcacttncat ctggtttgag cctttgttgg ccttcaccag 360
 cgccctnact tacgt 375

<210> 93
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 93
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 aaaaatcttg agcaaaaatt tggaaaattt tgtcatgcac cattcaaac tccatatcct 240
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 gcaataaaaa aaataataac aaaacaaaaa gtttgtgaca taacggataa actactagag 360
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 gatatgaaaa ttaaacaaac ccttgcggtg cgtggttagaa tgagagnggt aaataattca 540
 caggaaaaata 550

<210> 94
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 94
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 atacagcaat tcaggagtta tccgctgagg aaatcaattt gagcgcaatt agacgatcag 180
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 cggcgcgcgt ttgttatact tttaactttg aaagttttct ccatcgatag ttttcgttaa 300
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 aagaagccgc cagagagcac gatttcogagt tcgatggcaa gaccatggac agatgtatat 540
 gatgacaag 549

<210> 95
 <211> 240
 <212> DNA
 <213> Ctenocephalides felis

<400> 95
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 tcacttcgtc attttacatg tagaagtttt atcagctgtt ttccaagtaa ctccattgtc 180
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<210> 96
 <211> 431
 <212> DNA
 <213> Ctenocephalides felis

<400> 96
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 agaaacattg aatggattca ttttttcagc caatacaatc aaggcgggtt cggtagcttc 180
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 tttcaagtat acatcaccaa ttggttcata agtggatcca gtgatttcga attcagtga 360
 actgctatcg ctaccttcaa ttttgtcaaa gacaaacata cgagatcaga catctgatta 420
 gtggtcaaaag t 431

<210> 97
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 97
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 aaaaatgcga tgaaagatct ggcgactatg tagaaaaata atttgaaata caagctttcc 180
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 aattaatata tacattagac aaaggataac acaaaacttt tctggaagcc atagcagact 480
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<210> 98
 <211> 350

<212> DNA

<213> Ctenocephalides felis

<400> 98

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acccgaaaat acacgacgtt aaaatatgaa ataagaaaaa aaaactctac taatactacc 180
aaccaattac totataacta tttattatac aacaatccag ctgggtcagat atgaatagca 240
tgcctatgtt tcaactatit gaaaaaaagt aagtccttgt taaactaaca aatccgattc 300
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<210> 99

<211> 200

<212> DNA

<213> Ctenocephalides felis

<400> 99

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<210> 100

<211> 273

<212> DNA

<213> Ctenocephalides felis

<400> 100

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taaagaagca aagaaaattc tcagtgatga atctctatat gaagaattgg catcggatcc 180
gaacaactat caccatagac aagtttttaa atttataaat ttattagaga aaaagggaca 240
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<210> 101

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 101

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ccttataaaa gctatttcta tgggtataatt tatttaattt aaaaaaatt tgcaatatta 300
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gcttgtatatt taaaaagctg attaaaaattt atttgtgaagt atctaattta ttaaaaaaaa 360
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tgataatgtg atttgatgca ttttgcttta ttaaaggcta aattagttca aaaaggccag 480
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taaataatgt 550

<210> 102

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 102

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<210> 103

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 103

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cgaaagccag acaggctggc aaaaaagttg caactaaaaa tggatgaaga aatgacaaag 180
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ggaggagatt ggtcttttag gccttaattg aagcggcaaa tcatcactat tgctgtcttg 480
gtatcgtgaa gtaccaattc tgacatatag acatctttca ttaactagag aaatgctgta 540
ggntaattg 549

<210> 104

<211> 500

<212> DNA

<213> Ctenocephalides felis

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gCGTgaatta gaccatataa catctctgca gcctgttcta ttgcatctga ctgatttgga 240
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cgtggaattt gctcattaag gcctgttaga ttgaatttat cctgtatata gtcttcatcc 360
acctcgcaaa agaattcatt tcctcgtaga tcacaaaacc aagatatcca tgagacctcc 420
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<210> 108

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 108

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tttctatcac ttaccgaggc atttttcgca taaaacagag tgtgtccttt cagcctgaaa 120
tatcgccctc tccatcgctg taaggaccag gtctgcttca tgagaaatcc ctctctgggt 180
gcggcctgcc ggaaattaac agaaatcctt gtaatacaga aatgtgacaa gaatatTTaa 240
attggagttg acagtatcgt aatgaaatat cttgggcatg aaaagcattc gaagatagtc 300
tataatgggt ttaattcaat cagtttcaaa aaataagaat cttgatatcg atataaaatg 360
acaaaagctc tactaagatt ttttcttcag tataaaaaaa taatataaaa ttgttagaat 420
actttacata tatcgcataa ttcttaacac aatataaaaa tgaataatcc aaggnaacga 480
acgtatttaa tctcttacac 500

<210> 109

<211> 343

<212> DNA

<213> Ctenocephalides felis

<400> 109

caaaantgCG tctgagggac tgnntcttaa tttattcata atatcaaaat agttattnat 60
ttgcaaattg ntggtaattc actcgcggtt gtttatttat aattatatct ggntttcttc 120
tcgatttgct atttaacctn tagcagcctt ttgcactttt gctgntggta ataatttcct 180
atccgtaaca acacaatggg aaactgggaa taatcogtcc ttaagcacac atacgcaatc 240
actgtgcatt tcagttctac taatttggtc taccaaactg tttgatacta cactgatgaa 300
gttcttggtt tgcttttggg ctttagcgtg ttggaagntc tgt 343

<210> 110

<211> 491

<212> DNA

<213> Ctenocephalides felis

<400> 110

actcctatcg tttgtaacat ttacattccc ctttacttta ttattttcat ctctgctac 60

gatctgogat tcatttgaat cttcaatatt taaattcgct ggagcatttt cgatttcttc 120
aagagccgtc aacgctcgca gttcttcttc tatcaatttc tttctagcag ctattgcttc 180
aaccgagctt atactttccc ttttttcaca ctgcgcgctt ttccttgaac gaaaactgcg 240
tctctttcga ctacccgagc ctcttttcac ggttctggaa atcccatcca aatttcttaa 300
aaattcctcc tgaggcggtg caccaggtgt agaccagggtt gaccaggatt tgacgtcctc 360
ctcttcgtct ccggaatctt ccacaacttc cgcctttttt agcttttctc ggacactcct 420
cgtgtaatcg gacaagtcg gacttgctcg accgcaaato gaaccaacac acagacaact 480
cgcctttcaa c 491

<210> 111

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 111

acggaacca tgggaatgta aacaaaattt atacttattg ttaaaatctc totaaaatat 60
ctgataattt gatgtgcata tgtctaata tcatTTTTga ccgccaaatg gcacattttt 120
ttactttttc ctccatatct ccaaagtcgt tggacctttc caaaattttg aacagttctt 180
catttagtca atacaaataa aatgtttttt aaattattca aatcggaacg tccgttctct 240
taaaaactga gttaccgttt tcggcacttt ttgccccgta tcttcggaac ggctagacct 300
acctttgcc aaaaactaat agcacgtctt cttatcaata tgaatcgaat gttttttaa 360
ttattcaaat cggttgattc gtgttccoga aatcgtcgac gaaaatttgt atccgcacat 420
acatacatc acacacatac acacacacac acacacacat ccatncattt ttctaaggat 480
gccaaaatgt cagaaacctt 500

<210> 112

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 112

acggtaaaca atgtatcaa gattcttata catatttatt gctacttcat tactaactcg 60
aacaacagg tcaacaaaat atgtattttt tctttctgat acatcttcta agaaattcat 120
taatttagct gctaagccaa gtctacgaaa atctggggaa acagttaggg ctgtgacatg 180
tccatgccaa ttttctccat gaccttctgc ttgcccatt atatatcca ttatttctcc 240
gtttggggac tcagcaactt gaaaatactc tggccaatgc gctagatatt gcatgtagaa 300
tgaaagtcca tatgtttctg ttagtggatc taaatttaca ttattaaaat taaacatatc 360
attgcaagta aacggtctta atgtagtcat attaatnta ttgcaaaaga tatcagaagg 420
aatttaatta acaaaagtca cgcctttaat gaagtaaaat attcagagaa aaaataaaac 480
gagttactaa tatttctact 500

<210> 113

<211> 256

<212> DNA

<213> Ctenocephalides felis

<213> Ctenocephalides felis

<400> 116

gcgaagagag ttagatcact gtagaagaca gatttcagaa cagtccgggc aaatatctcg 60
tttacaatct gagttaagta ttagccaaaa aaatgaagga caatatacaa caaaattagc 120
tacagctttg gaaacagttg aaaaaaatat ggcacggagc aataaaaagg caatagatgc 180
tgaaagtaca gttgcaaagc ttaagaaaca gatttcacaa atgacgtcag agatgatggc 240
tcttcgaaat gaaaatacat cactgcgcta tgggtccagc gcaaattgatt ccaatagcat 300
gatgagatta tcaaattgagc tgcgaactgc agctagtact gcagagtcgt cactgaggca 360
actattaacg ggtgttgata atttaaggac tctgttagtt ctttagaaag ctctaaccga 420
atatttgaac cttctgatga caatttctgc gaaaatgaag atgaagatgc cggcctgact 480
ataatgtgta gtgaataaat ttntcattca aatgtcttgt attaaaataa atattctagt 540
ttatatgct

<210> 117

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 117

gaaatataga gaagttacta agaaaactat ggttaaacag tttgaatgtg ttaaggatca 60
cccgcgcca aaagctgtgt tctttacttg tatggacagt agaattgatac ctacaagatt 120
tacagaaact aatgttggtg atatgtttgt tgttcgaaat gctggtaatt tggtaacctca 180
ttcccaacat tttttggatg aatatataag tgctgaacct gctgctttag agttagggtg 240
tgtagtaaat gacattcggc atataattgt ttgcggtcac agcgattgta aagcaatgaa 300
cctgctatat aaacttcagg ataattgctt cgcttctcag gataatagga gaatatcacc 360
actacgagca tggttatgtt cgcatgcca aagcagtcgt gataaatttc aacaacttgc 420
tcttagtgat tataaaacac ctcttatttt tactgctgag actcctttaa gaaaatttgt 480
ggttatatag atcctgaaga tagttttctg tgaagacaaa tatcacaggt aaatctctgc 540
acaactcaa

<210> 118

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 118

cacaacgttg agttatcctt gtaattgcaa gtgcatttaa aaatataatt tgtttggcat 60
agaatttgtg aaaaaacagg agcataaata tgctttcaaa cattcggatt caaataaaaa 120
ttgcccgtgt acgagaatta aaagatctgc gttatttttc ttcttctaca acaattttcg 180
ctgaacacaa atgtcgggta ttggtggcgc gaggcggctc tggaggatgc accatggcat 240
caaaactttg ttcacatttg cgacaagatg atgtcattgt attagagcct agtcatgtcc 300
attattatca gccaatgttc acaatgattg gaggtggcat gaaaactttg gaacaatctc 360
gaaggccaat gtcttcagtt ttaccaaga aggtcgcgtg gctaaaagat tcggcgaaaa 420
cattcaaacc gatcgaaaat tcagttttta catcatctgg tgacaagata acatacacta 480
tctcgtgtgc tgtggttgaa acttnttacg caagatcctg gttgtaaaag ctttgctcac 540

caaatggca

549

<210> 119

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 119

aatatgtgtt tactatthta tgatactgta agaaaaaacg atacgtacgt aattctgaca 60
ttgactgtca ttaataatgg gatatgactt tcgaggttat tattgagaaa tgaaaacgta 120
gcattttactt atagtacgtt atatgggttt tgattgggtt aaataaaacta aataaaatga 180
agtgaacaa taacgatacg aatggccatt caaaaaggca tttggaagcg aagatctccg 240
aagctgaaga ggtaatagaa aaatctttat ctcaatgtga ggcagatgaa atttttatgt 300
ctttcaatgg gggcaaggat tgcaactgtt tattacatat actccaaaga gtttataaac 360
ttaaatatgg ttctgatgca cctccattac tctgtttata tgtgagacct aatgatcctt 420
ttcctgagat agaaagtttt gtgctgagtg caaaaatctg tccccataaa tctaatacat 480
ttntctttcc ttaaaactgc tttaaaagat ctgcagtgcg nacctcactc aaactagttc 540
atggatnccg 549

<210> 120

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 120

gactacaaa tgggtgttcaa gctcaatgtc gtgcctttgt tgatacatat ggagatgcct 60
ttattgccat atttgtgcaa gaattagatc catcgaggt gtgtcccaag ttatctttat 120
gtccaaataa agaagttgaa gtgtttgaac aagaagatac cagagacaaa ccaacttgct 180
ctatgtgtct aatggctatg tttgaattag aagagaagct taaggaggat aaaaccaagg 240
cagctgttga gcaagcacta tctggattat gcaatcatct ttctgatcat ctgaaacctg 300
cttgcttaac cttagtaaat acttattata atcaattagt tgaaatgctg atggctgatt 360
ttaaaccaca agaaatttgc gtgtacctaa gattatgcca tgataagaat cccgacttaa 420
gtgaattgga tattcttggtg cagtaccaat taataagacc catgattaat gcaaatgaaa 480
tattggacac cacaattaat ggcaaaccat caggtgtgtc aaacaactta ttctgaaaat 540
tttgccaac 549

<210> 121

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 121

gcataatgat aatccacatg tagaaaaaca aattgttgag ttaatatatg atgcoctact 60
atttgaaaac ttgtcaaaaa attataaaaa taccgcattg tggcaagaaa tttttgtttt 120
gccattctac tccctatata aggagaattt gataaaccta atagacattt tacatataga 180

tacaagatat gcaattgaaa ataaattaca ccaagcagcc agggcaaagg cactgtattg 240
gactcatgca ctttattatt ttgagaagga gttaaagtac tcgtcaaatt ctccaacgtc 300
actaagtttt gatgtagaaa aattatataa aagggttctt tgtaaagaga attcagatac 360
aaccgatctt ggctggatac atatcacaca gatattcaaa aatttaccg cagaatgcat 420
atctgtaaaa tttgatggca aaatgattca tggataagtt ccgctggaac caactgtgcc 480
gccagatgta tgtcagagtc cgaattacgc gatgattctg tactcnccgt cgagataatg 540
atgtctctg 549

<210> 122

<211> 339

<212> DNA

<213> Ctenocephalides felis

<400> 122

accatggctg atacttcaat tccggcatca ggatgggtatt ttccatcttt catcactcca 60
agtttcttgn aaacgcaatt gatcatgcat tttcctgctt ttgaatctgg tatgtttctt 120
tgcaataatt tttcgatata atctgaagat gctcctgttt ctacagcaca atctttgoot 180
atctgcaaaa gtttttctt tgcttcttct ttggtatagc tctgccgcag aatataaagc 240
gaccagtgtt ccaatcacca agaatatctt cattttgatt ttcttctact tcaaatttat 300
aaaacaattt gnttataatt ttcaaatgta gtatttact 339

<210> 123

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 123

cccgcacacc acacatacat caattttttc tgtgggtgcc aaatattcag aaaactcaaa 60
aacgtaaaga tatataaaat ttttcatttt cgattttttg cgattactat aacttgcccc 120
atgggaagtt aataatattg tgtagttatt tatgatcaat actaatatta tgtgtagtaa 180
tccataatca agacttttta tcatttttaa ctttcogtgg ggcaagttat agttatcgca 240
aaataatcga aaatgaaaat ttgatatac tttacgtttc aaaattttct gaatattttg 300
gtatacctta gaaaaaatgg atgtatgtgt gtatatgtgt atgtgtattt ttttatagag 360
gtgcgaaaaa aaatctccat aagcagacaa cgctagacgg tagtgtgaag atttttgcga 420
cgccttcttc ttactactgg ccttttctnc ggtttattct tcaaaggtgc tgtgcatatg 480
ctgctaagct gccagtttct 500

<210> 124

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 124

acttaaacta tgagctattc tgtaactcat tttttttatc tttattttgt aaaccatctt 60
gntcataaaa tttgctaact aogcatttac ttttttttg acctatata tttatctaaa 120

tactatttct aactctattc tatctgggcg tgcattaatt gtataaaaga gaaaaaaaaa 180
acagtctaaa caagtaattt ctattatata ataaatctcg caaaagaata aagaaacaac 240
agatgtaata cataataatt atatcaaaaa tagtcttact gttattataa aacatttgta 300
aagcgaatcg ggcatgaat ttaaaaaaaaa gaacaattat taaataatct cactatttaa 360
cctatgtgtt atacggtaac tcgccatttt ttttctcgc tttactttca ctttgcaaac 420
tatctctttc ctaaatccta gcgacttatg cattcttcgc tttcgcttat ttcattttatt 480
acatctagt 489

<210> 125

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 125

gattagtttg tagttaataa ttattaaaat gaacgactac ttatcttctc ctttaggatac 60
agattctagt aatttagatg tgccagctcc tattaaaact ggaaagactg catatcaact 120
ttctcogtat ctaaattata atcctgttta cctgcctgca agccaacccg aattttatttt 180
ccctgaaggg gctagtagac aaaggggctg ttttgaatta gccttttcgc aaattggatac 240
atcatgtatg ataggagctg ctttgggagg catggctggt acatacaatg gtctgaaggc 300
tacaacattg ttgggtcaaa ctggaaagct gcgaagaaca caaatgttaa atcacattat 360
gaaacaaggt tcagctacgg caaatacact aggaacgata gcagttatgt attctggact 420
tggtgtgcta ctgcatggct tcgaggagaa gatgacgaaa taaatacttt aggtgctgca 480
cagencagga cacttataaa tcacagctga cttaggaatg tncattgggtg gaggagtaga 540
tttctatac 549

<210> 126

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 126

ccggataaaa gatattttatt acaatggatg attcctcgcc agatttccat ttcaccacga 60
tcgattattg tgtttttggc ctggccctgt tcgtttcggc cctgacaggg ttgtactacg 120
gatgtaggaa atcaggggat gaatctgatg aaaacaatca gcagaacagc aataaaaagaa 180
cagaagagtt tctaaatgga aactccaatt ttaggcctct gccagtggct gcctctcttg 240
tcgccagtta tgtgtctggt gtcacgattt tgggaacacc ttcggagata tttcggtacg 300
gaaccaata ttggataata gtgttgccaa tcgctctgat gagcctagtg gtggccaatg 360
ttttcttcc gatgttctgc aagttgcaag ttcagagtcc ctatgagtat ttagaaatga 420
gatttaatcc gtggtgagga cgatagcatc cgctcatgttt gtcatagacg agctttgttc 480
taccaattgt atatatgtgc cagctttagc ttttaatcaa gtcaccggtg cgacgtcatg 540
gattgtacc 549

<210> 127

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 127

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agatttttaag gaaccttttac aacctgcgaa aactgtcaat attcagatcg acgcggtatt 60
cagtaaagtt ttagtacctt atccatcaag cataattcaa ctagagcgtc aacttgtact 120
ctatcatgga aatcattact ttactctgct ctatcgtact attaaacaac aaacaactgt 180
acaacttgct tctaagaaca tcgaaagctt ctctaaactg aaaccatttt cacaaagtga 240
taccacaata acttatggct catatgaaaa cataccagca ttactcatg acaaaatgac 300
gattcattat gagaatcata caccgttttt aacagttaca aaattggaaa gaacaattga 360
agtatcacat tggggaaata ttgcggttga agaaacaatt gacatggtgc attctggtgc 420
attactgaaa ggtcgtttcc agatatgaat tcaaaaagat tcacgaacgg ttggaagtgt 480
aaatcatata aaacttgctt ccagcttctg attggggtac tccggatcta tggaatattc 540
tcatcaata
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<210> 128

<211> 307

<212> DNA

<213> Ctenocephalides felis

<400> 128

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accattgtgg atgaggcaaa tcccatatac catgatgaag tttgcttgtt tcgaaagaac 60
agttgaattg ttatacactc atgtggttcc caaaccaga gcagagtga ctaaaggtga 120
acaattgggt gtcacctttg ctgctggtta cattgccggt gtattctgtg cagtagtttc 180
tcatcctgca gacacagttg ttccaagct aaatcaagac aaaggagcaa cagccattga 240
cgctgccaaa aaacttggct ttgctggttt atggaaggga ttaggaccta ggatcatcat 300
gatttgt
```

<210> 129

<211> 440

<212> DNA

<213> Ctenocephalides felis

<400> 129

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nctcctggcc aagaaacaag attggattgc attncatgca aatgcgccag cgatggaaca 60
gggtactttt gcaccgcgca agcatgtgct ccagttcacc atcataaacg atcagctgaa 120
gaagtgaaag aagtaaccac aacttccttg gcaacgactc catgcactcc tggagagaag 180
actcaaattg attgtaatac ttgcacctgt gccagggatg gctctggata cgctgcact 240
cgcaaaatgt gtttgccagc caccacgat cgtcgacgta gagaagctga aactgaagaa 300
gtcaaagaag tcacaactga tactttggca accactcoat gcaaagcagg agagcaaaga 360
caagtggact gcaatacctg cacctgtgcc gcggatggaa ctggatatca atgcaccgcn 420
caagcttgtg agtttgcagt
```

<210> 130

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 130

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acatatgatg ctacatccat tttgacagca tttcgctgga ccccgacatt gagcgtctgt 60
atggcattct cgagaacatc tatctttctc atgtccagca acaaaactga ctggacaaga 120
tcctggtttg ttttctaataa aaataattat taaaatagat ttattcttct acatttattc 180
taaataaaaa tattttttatt ttaataaaga catagcctat ggaacgaaac ttaccgagcc 240
gacattctcc aatgaaaact gttctaccgg aaacttcacg tcgttgcaag tctattccgc 300
atgaacttcc ttcgtgacag cggatatcag aacaaggatc aaagcatgag cattgaacac 360
aattattttt atccacagat ttatgaattc cgtaaggaca acgtaattct tcacacgacg 420
gatcgtcatt gatgcaattg ttaataatat tctctaaatg aaaaaaacia attagcaatc 480
attaaatctt cttaaaaaata 500
```

<210> 131

<211> 376

<212> DNA

<213> Ctenocephalides felis

<400> 131

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actaattgtg gccccgcaa tttcaaaaat gttgatttag tttgagctgc acatgcacga 60
gccaataatg tttttcctgt cccgggtggc ccataaagta aaacgccttt ggggtggatgt 120
atccctaaat ttatgaactt ctctttgtgc gtcattggca atacaaccgc ttcaattagt 180
tcttggaatt gcttgtctaa gccaccaatg tcagagtatt gttctgtagg ccgctcatca 240
acctccattg ctttgactcg agcatcatat tcagcaggta atgtttccaa aattaaatat 300
gagtctttgt tgacacctac taaatctcca ggcttcaatt gttctggatc tactaaacct 360
ataacaggta gaaagt 376
```

<210> 132

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 132

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acggaaccca tgggaatgta aacaaaattt atacttattg ttaaaatctc totaaaatat 60
ctgataattt gatgtgcata tgtctaata tcatTTTTga ccgcaaattg gcacattttt 120
ttactttttc ctccatatct ccaaagtcgt tggacctttc caaaattttg aacagttctt 180
catttagtca atacaaataa aatgtttttt aaattattca aatcggacgc tccgttctct 240
taaaaactga gttaccgttt tcggcacttt ttgcccgtat cttcggaacg gctagacct 300
cctttgcaa aaactaatca gcacgtcttc ttatcaatat gaatcgaatg ttttttaaat 360
tattcaaate ggttgattcg tgttcccgaa atcgtogacg aaaatttgta tccgcacata 420
catacatata cacacatata cacacacaca cacacacata catccatttt ttctaaggta 480
tgccaaaatg gtcagaacct 500
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<210> 133

<211> 235

<212> DNA

<213> Ctenocephalides felis

<400> 133

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gaaggaaaac tttaaaatag cgcgaatttc ggcgtaagt aactccatgt ttacacgtct 120
ataactgtta aacgcaatat ccaaactaat catgcatagc atcgttttgt aggttatgtc 180
aagacctttc aaattatgta tagtattgcc agatacgagc tctgtagcgc tttgt      235
```

<210> 134

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 134

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acatgtctat atttgctata ttattaccct acacaaatcc ttttcgatat aatcattaca 60
tagtatcaot agctcatcat gttatagctg cttggttttt aaaatgcagg ctgcctttca 120
ggagagattt tgtaaaattt atcaccacgg tatgtgtgaa atataacaat tgtgttaact 180
tggtagtaaa caaaatatat taatcaattc atgacgtata gggcctaaa tcaaattgca 240
ttgcaccatt tgaggaanga aggatattaa ttaaaccaga ggttacaact ttgaatgaag 300
aatcatctta cngaaaaaga aagtctaggt taacagaacc agntaggtat ttggagggtt 360
tcataagaaa aatgggtgaa atggtaaatg ncacoccaag ttttattggc ngccaaaaaa 420
aaatgnnttg canattancc taacntocaa attttgggta ntgnataatt ttttaatttac 480
cataatctan ggggttnaaaa      500
```

<210> 135

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 135

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ctacgatatt tctgncaagt cgaactacaa ttttgaaaaa ccattcctgt gggtggctcg 60
caagcttatt ggagatccca acttagagtt cggtgcaatg ccagcattgg tgcctccaga 120
ggtcaccatg gaccagaat ggaaacagaa gatagagaag gatctgaagg aggctcaaga 180
aaccgctttg ccggaagatg atgaagactt ataagttact ttgttataga caacatgaat 240
gttttgata ttttgttaat gaaaatgggt gggttggaatt tgaataatag agaatgggtt 300
ctgcaaaatg tcgtgaaata attattttta cgccagatgt atttttttat tcttaatcat 360
ctgnaaagtg aaaaatttaa aaatgtgagt gctgtaatca tgaatgctga gtgtaatata 420
acttttttaa gnaactcgcc taatttttaa ttataattta atataatggt aaccagttgc 480
atccaagttt cagtggatatg      500
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<210> 136

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 136

atatagtggt ctattaaaga ataactgctg aataataaat taaacagaac caatggctgc 60
aattcgaaaa aagttagtga ttgtcggaga cggagcgtgc ggtaaaaactt gtttgcctgat 120
tgtatttagc aaagatcaat ttccagaagt atatgtccca actgtttttg aaaactatgt 180
ggctgacatc gaagtogatg gaaaacaagt tgaacttgcc ctttgggata ccgccggaca 240
agaagactac gatcgcttgc gacctctcag ttatcctgat actgatgtca ttctgatgtg 300
tttttctgtc gactcacctg attcattaga aaatattcca gaaaaatgga ctccagaggt 360
gaaacacttt tgtccaaatg tacctattat tcttggttga aataagaaag atttacgcaa 420
tgacccaaac acaatcaaag agttaagtaa gatgaaacag gacctgtgaa gccacaggaa 480
ggcgtgcctg gccgagaaga taaatgcttt gatattttaa tgtctgttaa tcaaaagaag 540
agtccagagt 550

<210> 137

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 137

attaccaagt accacctgaa ggaaggatcc ttgtgggaca taaacaatta cctcgagctc 60
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tcaattagat tctatgttag gaaacttaca agcagacatg tccagacaag gtgttaatac 180
tgctcaaaaa ggaagctgtg gtgcttgtga caaagccatt gttggccaag ttataactgc 240
tcttggtcaa acatggcatc ctgaacattt cgtttgcaac cattgcaacc aagaattggg 300
aacaagaaac ttcttcgaaa gagatggaca cccatactgc gaacctgatt accataattt 360
gttcagccca agatgcgcgt attgcaatgg agctattttg gataaatgcg taacagcctt 420
agaaaaaact tggcacacag agcacttctt ctgcgcccac tgtgggtcaac aatttggtga 480
aaaggttcac gaaaaagatg gtaacctat tgcgcatgct atttcgattg ttgtccaat 540
gtggagatg 549

<210> 138

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 138

gaacgcccac cgagtgaag atttattttc gtattttatt tcggtttatt gtgcaaacat 60
ttcgatactt ttgaagtatt gagaactgtg aatagtgttt ctgatttatt atttatattc 120
atcagcgctt gatccaagaa aagccttcca aaaatgagtg tcgctcgcta tgaagatatt 180
gttgaggcc ctttggccaa atttttgagc ctttcaaaaa gtattggcgg agatgttgcg 240
cagcaaactg tttttgtgga gaatgccttt aaggcacaat tagcttttat cacaactgct 300
agcactgcat cacaacctgc tctgatgtc ttacaacaat tattgcaacc gaccagccaa 360
cagatattag cggctcaaga atttcgagaa aagcatcggt catcgaactt cgtgaatcat 420
ttagcggcga ttagcgagag cattgcgcac tcggatgggt ttgatttccc taccctgtgt 480
gcatgtgaaa gaaatgcatg atgctgacgt tctcactgcc ggtcttgaag agaaaaggct 540
actgccaat 549

<210> 139
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 139
 gccagtgccg ccatgtctga gagcttgaag caactgccag taatctgggt tttaggtgga 60
 cctggatcgg gcaaaggaac ccaatgtgac aaaattgttg cttaaataatgg attcaccac 120
 ttgtctactg gtgatttgcg ccgagctgag gttcaaagtg ggtagatag aggcaagaac 180
 ctacaggcta tcatggagag aggagaacta gtacccatgg acatagtact tgacttatta 240
 aaagaagcta tgactaaggc cttgcccaca tctaaaggat ttttaattga tggatatccc 300
 cgtgaaaaag accaaggtgt ggctttcgaa aatcaagtga ctcccgtaaa cacaatttta 360
 tatttcgaat gtaagcctga aacattgggc gaacgtcttt tgggacgtgc aaaaacttct 420
 ggccgagctg atgacaatga agagaccatc aaattgcgtt tgatcttcat gccataaatg 480
 accaagtttt ggcttatccc agacagactg aagagataac gcgaaaggca gtgataatct 540
 ttgcggaga 549

<210> 140
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 140
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 atattttact ccnccggccg gannangeta gcngnttccc tgntcattgg cggnggcccc 120
 ccnnnctctn cnnncccc tcnctcccn cctcnccncc ccnnnctct acntctctcc 180
 ccccnccncc nncctttntc tccccnccc ctccnnnnn ctentctctc ttcngnccn 240
 ncncccncc ncnctcnncc cctcttccct centcnccn ncncttcccn cctcncccn 300
 tntcccnccg ccccnccnn ctcccnccc tntnctnccn ngcnccnnn cennctcnn 360
 nctcnncc cccnctctc ctcccnccc nnnnncccc ctccccctt cncnctcnn 420
 ntcgnnctn nctctncc cntnccnnn ncnccnct ntnccnccg ctccccctt 480
 ntnnctcnn cctccnctc 500

<210> 141
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 141
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 taattataat tacaataaac aacataaata tataacacat atgttttata tgttaacaac 120
 attaaacttt ataaataagt attaatatat aagccattaa tatttgcttt agggtaaaaa 180
 cttaatacaa ctccataaaa tataaggcct tgattattca caattatctg atttaaggca 240
 ttaaggtaat tgttgaagtt tatgaattat aaaacttttt actttataat cataatataa 300

gttaattgac tgaataaata atttgtttgt ataggtaact atgaccagcc acccggttaac 360
 ttatggaaca tttcttgatt caactgttga ttigcatctt tagatctcat tgacataaat 420
 atgtaacctc cgataaactc atggatcacc ttgcaatctg ctgataagca tgaaaatatt 480
 atgntttctt cttcgaatga 500

<210> 142

<211> 285

<212> DNA

<213> Ctenocephalides felis

<400> 142

acctgngtat ttaattcttc ttattataac atgtttnagt atcatatatt naatatacct 60
 gaattacgga tatatnacta taaacaattt ctaaacataa aatcatattt acacaaatat 120
 tttttatcta ttatttcaat ttagcaaaaa cttctcccaa catttgatta cataaagcag 180
 cataaggatt catttccacc aactgatttt ttgcaaaggt ggagcctaag cttgcggctt 240
 tgttgaaatc ttcccgagct aaatcgtctt caccagtttt tctgt 285

<210> 143

<211> 198

<212> DNA

<213> Ctenocephalides felis

<400> 143

accacaggca ttgacacaag ggtaacaca actattgtcg atacaagctt ggtcttgtct 60
 gcattottca cttcctatgc attcgtatcg aaaacactgc ctcaaaggat ctcctttatg 120
 atttggcagg catgaacaaa caggtaaccc ctcatggctt ctagtgcatt gcgcatttac 180
 accacagggtg tgataggt 198

<210> 144

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 144

ataaaaataat tttaaaaaaa atatttttaa atttattagt tatgtaatnt aaaatgaaat 60
 antaataata ataatagtag attagtattg taaaagaaaa attaaaatng tgtataagta 120
 aatttaattt attgtatctn gtgtatcaga gttaatttaa taaaagatat gaagaatatt 180
 nttctcgaat ttaaaagggg aatttattat ttaatttaat gnaatataat tatttaaaat 240
 aataaattag taatgaaatg ttattcgnnt ttaaagntat ctagnntttt tagaaaataa 300
 ttttaatttat tatattttaa tatttatatt aatttattaa atatagatat tttaaatata 360
 aaatattttt agggataagc ttaaaaataa attattataa attaataaat tatttataaa 420
 tttatagggg tataaatatt cattaatata aaaangtata atttatttat aaataaatta 480
 aaattagtag attttaaatt 500

<210> 145
 <211> 474
 <212> DNA
 <213> Ctenocephalides felis

<400> 145
 acaaaaacgc aggaaacccc acggnatgcat ttctataaaa taatatcata gatttgaaaa 60
 ctatccgaat ccaaaagttt taacgcctaa tatttatatc aaaactttcc caacattatc 120
 cctagattct ctttaataaaa ctttcatttc attattagaa ccaactgaac tcaagtttaa 180
 taaaaccatt tcaacattta ttaataattt caaaaacttt atatatcacc attatcccca 240
 gcagaagtat cggagcagtc ataaaattct tcatcagaat ctcccgact ttcggactta 300
 ttttcaggat ttgttgaagc agcattgtcc cgttcttgct gccgagcaac gcagcaattc 360
 agcaattgta attgttggtg aagaatacac gtgcgaggat cgggaaatcc gcctccaact 420
 cccggtattt tgtggtatta tcaatcctgt atctcaattc ttccacaaat tcgt 474

<210> 146
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 146
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 ctngngnggtt ggctccaaag cattttcaca atacgcttct tattttattg atcctgtttt 120
 caaaccacaa aaacaaaatg aattagctca agaagggtan atccaaaact tgcacacgtg 180
 cctattaaag ctgctcgaaa taatgatact agctctgtat tccatgatga tctacttagc 240
 aaattcacia attatgttat gaaaggcgga caaaagggtt tggttagaaa tttaatagat 300
 gaagcttttg tgaatattaa aagaatacaa attgaaaaat atcacaaggc taaagaggaa 360
 aataagagta atattatact aaatccaaaa gtgatattgc acaatgctat tacaattgac 420
 aggccaggtc taacacttac accaatcaaa agaggagggtg ntggtatnag ttcctatccc 480
 gacactgaga agcactcata 500

<210> 147
 <211> 347
 <212> DNA
 <213> Ctenocephalides felis

<400> 147
 caattatgtt atttcacctt taaaacttgt attatagcat aatagacaga attatacttc 60
 atctattcat cgtttccgca aataaaccac ttogaaaatt acaatatatt ttgcataata 120
 aaattacata ggaaaaataa aacatctatt ctaattaact tactccaatt tttgaggcta 180
 ttttatcagc acatatttca gcaatatctc gacctagcac gccataatat aaccataaaa 240
 atagtaacaa aaaacctaag tccatccaag aatgcccgtt ttgattgaag attaaattga 300
 ctccagcaaa tgttgccatc accattccat aaccaattat accaagt 347

<210> 148

<211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 148
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 tgatgcttcc acacaaatac ctatttagta aaataaaaact aaatgaaatt tattagtatt 120
 ttccaaactc atagctcagg caatattata attaatttgg tagaggcagt cttataataa 180
 gcatgcaaaa acaaaaataa atatttttga aaaaaactat taaagtgaag aaactgatca 240
 atacagttaa actataaaaa aaaggtaaca cttataact aacagccgaa caaaataaga 300
 aagaagcact tcattaaaca cttacaggta tctggttaaa tcctctatat caaccagcat 360
 gctatcttgg ctcatatgaa gttcatcaag attcattaat aagccaccca actgttcatt 420
 aaatatttca acctgtgtat ggagtcggca aacaacaacc tgcaattgag caatcgatcat 480
 gctggtcaac aaacgccggg 500

<210> 149
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 149
 acttacaact gcctaaatgg tccggtatgt cttntatgtt cggtaaaggg tatgaatcac 60
 ccagggggcgt aacgtgcctt ggcggggccc catatcaaaa tcggtttggg ggctccccta 120
 aagatttttc ataattttaa gaaacataaa gagattaata aattcattta ataaaattaa 180
 aagaagattt atttatcaaa ttttcaaata tacatcgaat attattttta atattttaca 240
 agtaactaaa attaaatatt cactctcctt gcctttttat cagcaaaactg atttattaag 300
 tcatttatag ctgatgttgt ttttagtttt totaatgttt ttgcctctat ggacaataga 360
 gacaggtctg atagacgttc ctgttttatt gatgttctga gataattttg gattaatttt 420
 aattttgaaa aactcgtttc agcagttgcg gttgtaactg gaagggcaag aataaaatgc 480
 aagctgttat tacatccgga 500

<210> 150
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 150
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 tgtagatcaa actaaacagg aataaaattg aataatacac aatgggaaaa ctgaacgtat 120
 caatattacg ttatttagac aaagaagact ttcgcggttt gacggccatt gagatgggca 180
 tgaaaaatca tgaactggtg ccgggatctc ttacagctct gatcgcaaat ttgcgacatg 240
 gtggtgttca caaaatttta agagaacttt gcaaacatcg gttgctgagc tacgaacgtg 300
 gaaaacatta tgatggatac aggctgacaa atatgggcta tgattatctg gccttgaaag 360
 cattaactat gagaaacgtt gttgagtcac ttggaaatca aattggtgtt ggtaaggaat 420
 cgaatattta tgtttagtga gatgaagaag gtgaagcctt atgtcttaaa ctcccagatt 480
 ggccgaacat gctttcagat gtaagcaaat agagatatca tcacatagca tagagctctg 540

gnttattatc

550

<210> 151

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 151

ggaacgtgca acatatttag ttatttaaata aatttgataa ttttaacaaaa atggcaacca 60
ttgttcgcaa aatcatcagc accaaagctg cagccaagcc agtggcccca tataatcagg 120
caattttggc cgcacgcact ctctacgtat cgggatgtct aggattggac gcctgcacaa 180
tgaaattggc cgcaggagga gctgccgccg aagcaagaca agctttgacc aaccttggac 240
atatcttggc cgcctggcgc tcatcatatg accgtgttgt gaaaaccacc gtcttacttg 300
ccgatttagc tgaccttgca gctgtaaatg aagtttatgg acaagtgttt acacatgacc 360
accctgccag atcctccttc aagttggagc actaccaatg aatgctaagg tcgaaattga 420
agtcgttgca gtttcaggag acgtccgaac tattccggag tggaatgcta agaaagtaag 480
aataatatca taattaatag tgttcagtaa attatagttt atatgtaaat aattaactac 540
catagtttt 549

<210> 152

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 152

acgaaagatt tcgatggggc ggagcggggc agatggagga cagctacgaa gcggcctttac 60
gacgaggact gccctatccc gtccttacgg tcgctgaata cttctcgctg ggacaagaag 120
gattcgcttg gggaggacaa tatagagctg cgggatatta tgcttcgatt ttacttggtg 180
cggcattggc gtgttggtcg cttatgaacc tgcctcgtgt agctgtcccg cgatatggag 240
cctatttgat gtttacgact gggccttttat tggctgccac ggatttaggc tactatctga 300
tgttgccagc aaggcctcta cgaattgtac ttgaaggcgg agcgcctcgat tttcgattag 360
gatggtgctt ctggctggtc ttagttgctg gaagtatatg ctcatcttcc ggattagtaa 420
taacgtgcgt ggatttggca tttctcaccg attttcgact gtcttgaggt gactatgac 480
tcctacgat cgnacgttat attgaagaga cccgacacgc ctccaggaaac gcacagtggc 540
gnaacngcg 549

<210> 153

<211> 633

<212> DNA

<213> *Ctenocephalides felis*

<220>

<221> CDS

<222> (67)..(507)

<210> 154
 <211> 147
 <212> PRT
 <213> Ctenocephalides felis

<400> 154
 Met Lys Ile Phe Leu Val Ile Gly Thr Leu Val Ala Leu Tyr Ser Ala
 1 5 10 15

 Ala Glu Ala Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu
 20 25 30

 Gln Ile Gly Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp Asp
 35 40 45

 Ile Glu Lys Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Pro Gly Lys
 50 55 60

 Cys Met Ile Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly
 65 70 75 80

 Lys Tyr His Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu
 85 90 95

 His Asp Ser Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys
 100 105 110

 Asp Ser Glu Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys Ala
 115 120 125

 Met Glu Cys Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp Ala
 130 135 140

 Ile Pro Ile
 145

<210> 155
 <211> 633
 <212> DNA
 <213> Ctenocephalides felis

<400> 155
 tttttttttt ttttttttaa atagcatttt attcctacgc ccacatcgtg acaacttcac 60
 actacaattt aacgactaca ttttgacagg tcttcaaccg aocaaatatt aaatttttaa 120
 ctattatatt ggtatcgcgt ccattaggtt gtgttctttg gccatcctca cgccgcactc 180
 cattgctttg gcagcaattt cgactcgtc ttctcctttg gcttcgctgt cacattcggg 240

tgcgattttc ttaacttttt ccattaattc tgaatcgtgt tcgtgtacca tggctgatac 300
 ttcaattccg gcatcaggat ggtattttcc atctttcatc actccaagtt tcttgtaaac 360
 gcaattaatc atgcattttc caggctttga atctggtatg ttcttttgca gtaatttttc 420
 aatatcatct gaagaagctc ctgtttctac agcacaatcc ttaccaatct gcaaaagttt 480
 ttcttttgct tcttcttttag tatatttagc agcctctgcc gcagaatata aagcgaccag 540
 tgttccaatc accaagaata tcttcatttt gattttcttc tacttcaaat ttataaaaca 600
 atttgtttat aattttcaaa tgtagtattt act 633

<210> 156

<211> 441

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (1)..(441)

<400> 156

atg aag ata ttc ttg gtg att gga aca ctg gtc gct tta tat tct gcg 48
 Met Lys Ile Phe Leu Val Ile Gly Thr Leu Val Ala Leu Tyr Ser Ala
 1 5 10 15

gca gag gct gct aaa tat act aaa gaa gaa gca aaa gaa aaa ctt ttg 96
 Ala Glu Ala Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu
 20 25 30

cag att ggt aag gat tgt gct gta gaa aca gga gct tct tca gat gat 144
 Gln Ile Gly Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp Asp
 35 40 45

att gaa aaa tta ctg caa aag aac ata cca gat tca aag cct gga aaa 192
 Ile Glu Lys Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Pro Gly Lys
 50 55 60

tgc atg att aat tgc gtt tac aag aaa ctt gga gtg atg aaa gat gga 240
 Cys Met Ile Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly
 65 70 75 80

aaa tac cat cct gat gcc gga att gaa gta tca gcc atg gta cac gaa 288
 Lys Tyr His Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu
 85 90 95

cac gat tca gaa tta atg gaa aaa gtt aag aaa atc gca acc gaa tgt 336
 His Asp Ser Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys
 100 105 110

gac agc gaa gcc aaa gga gaa gac gag tgc gaa att gct gcc aaa gca 384

<213> Ctenocephalides felis

<400> 161

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tattggtatc ggcgtccatta ggttgtgttc tttggccatc ctacgcccgc actccattgc 60
tttggcagca atttcgcact cgtcttctcc tttggcttcg ctgtcacatt cggttgcgat 120
tttcttaact ttttccatta attctgaatc gtgttcgtgt accatggctg atacttcaat 180
tccggcatca ggatggtatt ttccatcttt catcactcca agtttcttgt aaacgcaatt 240
aatcatgcat tttccaggct ttgaatctgg tatgttcttt tgcagtaatt tttcaatatc 300
atctgaagaa gctcctgttt ctacagcaca atccttacca atctgcaaaa gtttttcttt 360
tgcttcttct ttagtatatt tagc 384
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<210> 162

<211> 631

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (65)..(505)

<400> 162

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gtaaatacta tattggaaaa ttataaaaaa gtttatttat aaatttaaag tagaagaaat 60

caaa atg aag ata ttc ttg gtg att gga gca ctg gtt gct tta tat tct 109
Met Lys Ile Phe Leu Val Ile Gly Ala Leu Val Ala Leu Tyr Ser
1 5 10 15

gtg gca gag gct gca aaa tat acc aaa gaa gaa gca aag gaa aaa ctt 157
Val Ala Glu Ala Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu
20 25 30

ttg cag ata ggc aaa gat tgt gct gta gaa aca gga gca tct tca gat 205
Leu Gln Ile Gly Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp
35 40 45

gat atc gaa aaa tta ttg cag aag aac ata cca gat tca aaa gca gga 253
Asp Ile Glu Lys Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Ala Gly
50 55 60

aaa tgc atg atc aat tgc gtt tac aag aaa ctt gga gtg atg aaa gat 301
Lys Cys Met Ile Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp
65 70 75

gga aaa tac cat cct gat gcc gga att gaa gta tca gcc atg gta cac 349
Gly Lys Tyr His Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His
80 85 90 95
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gaa cac gat tca gaa tta atg gaa aaa gtt aag aaa atc gca acc gaa 397
 Glu His Asp Ser Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu
 100 105 110

tgt gac agc gag gcc aaa gga gaa gac gag tgc gaa att gct gcc aaa 445
 Cys Asp Ser Glu Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys
 115 120 125

gca atg gcg tgc ggc gtg agg atg gcc aaa gaa cac aac tta atg gac 493
 Ala Met Ala Cys Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp
 130 135 140

gcg ata cca ata taatagtaaa aaaatctttg ttaggtcggg tgaagacctg 545
 Ala Ile Pro Ile
 145

tcaaaatgta gtcgttaaata tgtagtgtga agttgtcacg atgtgggctg aggaataaaaa 605

tgttattttaa aaaaaaaaaa aaaaaa 631

<210> 163
 <211> 147
 <212> PRT
 <213> Ctenocephalides felis

<400> 163
 Met Lys Ile Phe Leu Val Ile Gly Ala Leu Val Ala Leu Tyr Ser Val
 1 5 10 15

Ala Glu Ala Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu
 20 25 30

Gln Ile Gly Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp Asp
 35 40 45

Ile Glu Lys Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Ala Gly Lys
 50 55 60

Cys Met Ile Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly
 65 70 75 80

Lys Tyr His Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu
 85 90 95

His Asp Ser Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys
 100 105 110

Asp Ser Glu Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys Ala
 115 120 125

Met Ala Cys Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp Ala
 130 135 140

Ile Pro Ile
 145

<210> 164
 <211> 631
 <212> DNA
 <213> Ctenocephalides felis

<400> 164
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 actacaattt aacgactaca ttttgacagg ttttcaaccg acctaacaaa gattttttta 120
 ctattatatt ggtatcgcgt ccattaagtt gtgttctttg gccatcctca cgccgcacgc 180
 cattgctttg gcagcaattt cgcactcgtc ttctcctttg gcctcgtgt caccattcgg 240
 tgcgattttc ttaacttttt ccattaattc tgaatcgtgt tcgtgtacca tggctgatac 300
 ttcaattccg gcatcaggat ggtattttcc atctttcatc actccaagtt tcttgtaaac 360
 gcaattgatc atgcattttc ctgcttttga atctggtatg ttcttctgca ataatttttc 420
 gatatcatct gaagatgctc ctgtttctac agcacaatct ttgcctatct gcaaaagttt 480
 ttcctttgct tcttcttttg tatattttgc agcctctgcc acagaatata aagcaaccag 540
 tgctccaatc accaagaata tcttcatttt gattttctct actttaaaatt tataaataaa 600
 cttttttata attttccaat atagtattta c 631

<210> 165
 <211> 441
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (1)..(441)

<400> 165
 atg aag ata ttc ttg gtg att gga gca ctg gtt gct tta tat tct gtg 48
 Met Lys Ile Phe Leu Val Ile Gly Ala Leu Val Ala Leu Tyr Ser Val
 1 5 10 15
 gca gag gct gca aaa tat acc aaa gaa gaa gca aag gaa aaa ctt ttg 96
 Ala Glu Ala Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu
 20 25 30

Ile Glu Lys Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Ala Gly Lys
 50 55 60

Cys Met Ile Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly
 65 70 75 80

Lys Tyr His Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu
 85 90 95

His Asp Ser Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys
 100 105 110

Asp Ser Glu Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys Ala
 115 120 125

Met Ala Cys Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp Ala
 130 135 140

Ile Pro Ile
 145

<210> 167
 <211> 441
 <212> DNA
 <213> Ctenocephalides felis

<400> 167
 tattggtatc gogtccatta agttgtgttc tttggccatc ctcacgccgc acgccattgc 60
 tttggcagca atttgcact cgttttctcc tttggcctcg ctgtcacatt cggttgcgat 120
 tttcttaact ttttccatta attctgaatc gtgttcgtgt accatggctg atacttcaat 180
 tccggcatca ggatggtatt ttccatcttt catcactcca agtttcttgt aaacgcaatt 240
 gatcatgcat tttcctgctt ttgaatctgg tatgttcttc tgcaataatt tttcgatatc 300
 atctgaagat gctcctgttt ctacagcaca atctttgcct atctgcaaaa gtttttcctt 360
 tgcttcttct ttggtatatt ttgcagcctc tgccacagaa tataaagcaa ccagtgtctc 420
 aatcaccaag aatatcttca t 441

<210> 168
 <211> 384
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (1)..(384)

<400> 168

gca aaa tat acc aaa gaa gaa gca aag gaa aaa ctt ttg cag ata ggc 48
Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu Gln Ile Gly
1 5 10 15

aaa gat tgt gct gta gaa aca gga gca tct tca gat gat atc gaa aaa 96
Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp Asp Ile Glu Lys
20 25 30

tta ttg cag aag aac ata cca gat tca aaa gca gga aaa tgc atg atc 144
Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Ala Gly Lys Cys Met Ile
35 40 45

aat tgc gtt tac aag aaa ctt gga gtg atg aaa gat gga aaa tac cat 192
Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly Lys Tyr His
50 55 60

cct gat gcc gga att gaa gta tca gcc atg gta cac gaa cac gat tca 240
Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu His Asp Ser
65 70 75 80

gaa tta atg gaa aaa gtt aag aaa atc gca acc gaa tgt gac agc gag 288
Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys Asp Ser Glu
85 90 95

gcc aaa gga gaa gac gag tgc gaa att gct gcc aaa gca atg gcg tgc 336
Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys Ala Met Ala Cys
100 105 110

ggc gtg agg atg gcc aaa gaa cac aac tta atg gac gcg ata cca ata 384
Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp Ala Ile Pro Ile
115 120 125

<210> 169

<211> 128

<212> PRT

<213> Ctenocephalides felis

<400> 169

Ala Lys Tyr Thr Lys Glu Glu Ala Lys Glu Lys Leu Leu Gln Ile Gly
1 5 10 15

Lys Asp Cys Ala Val Glu Thr Gly Ala Ser Ser Asp Asp Ile Glu Lys
20 25 30

Leu Leu Gln Lys Asn Ile Pro Asp Ser Lys Ala Gly Lys Cys Met Ile
35 40 45

Asn Cys Val Tyr Lys Lys Leu Gly Val Met Lys Asp Gly Lys Tyr His
50 55 60

Pro Asp Ala Gly Ile Glu Val Ser Ala Met Val His Glu His Asp Ser
65 70 75 80

Glu Leu Met Glu Lys Val Lys Lys Ile Ala Thr Glu Cys Asp Ser Glu
85 90 95

Ala Lys Gly Glu Asp Glu Cys Glu Ile Ala Ala Lys Ala Met Ala Cys
100 105 110

Gly Val Arg Met Ala Lys Glu His Asn Leu Met Asp Ala Ile Pro Ile
115 120 125

<210> 170

<211> 384

<212> DNA

<213> Ctenocephalides felis

<400> 170

tattggtatc gcgccatta agttgtgttc tttggccatc ctcacgcgc acgccattgc 60
tttggcagca atttcgact cgtcttctcc tttggcctcg ctgtcacatt cggttgcgat 120
tttcttaact tttccatta attctgaatc gtgttcgtgt accatggtg atacttcaat 180
tcggcatca ggatggtatt ttccatcttt catcactcca agtttcttgt aaacgcaatt 240
gatcatgcat tttcctgctt ttgaatctgg tatgttcttc tgcaataatt tttogatatc 300
atctgaagat gctcctgttt ctacagcaca atctttgcct atctgcaaaa gtttttctt 360
tgcttcttct ttggtatatt ttgc 384

<210> 171

<211> 133

<212> DNA

<213> Ctenocephalides felis

<400> 171

ctgtangtga agaattatta ggcagagtag ttgatgcttt aggaaatgcc attgatggca 60
aaggtgcttt acaaagcaaa accagattcc gtgtaggaac taaagctccc ggtatcattc 120
cacgtgtctc tgt 133

<210> 172

<211> 498

<212> DNA

<213> Ctenocephalides felis

<210> 175
 <211> 236
 <212> DNA
 <213> Ctenocephalides felis

<400> 175
 tttttttttt tttttttttt ttttttttgg naaattttctc tagangaaag aggnnttaaa 60
 acagcaaata cataagattg aataatagat acagcanttt ntaaaattaa taaaattaat 120
 tgagagaaaa ttaaaattca aattaatcat atagataggg agtttcctgt attgccaagt 180
 aaagttagaa ttaaattgtcc agcaattatn tttgctgaga gtcggatggc taaagt 236

<210> 176
 <211> 161
 <212> DNA
 <213> Ctenocephalides felis

<400> 176
 atcttgtcct tcctgggtcac ggaagtattc agntacagtt aatccagtca aagcgacacg 60
 ggcacgggcg cctggggggtt cgttcacatctg tccgtagaca agagctacct tggaggtctt 120
 gtctttcaag gaaatgacac caccttcaat catttcattg t 161

<210> 177
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 177
 gacangttat gttattttatt tcactctgatt ttatcacata aaaacaaaaa taagtagcat 60
 ggatttcata ctttttaatta taaaatgcag tacagtttaa aatttgtcaa aaagacagtg 120
 ttacttatit aataatacat gaaattatgc aacttacatt ttcatttttg ataacgtatt 180
 tctaattcaa tactcactta ttttattaaa ttatgcatta aaagtagcta aaaagtcagc 240
 tacaattttc ttttaattggg catcagatgc ttcactaatc gttccttcct tggcaatggg 300
 ttgcaaaagg gatgaatggg tggctttgat gtgagcgta aattcctttt caaatgctgt 360
 gatcttgggt ggggtccattt tgtccaagtg tcctcggaca ccacagtaga taattgcaac 420
 ttgttcttca atagccattg ggacatattg ccttgcttca ataattcagt caaacgaaca 480
 cctctgttaa caattgtgtg tggatgatcaa gactgaccga attggcaaaa gcagcaccta 540
 cgatttgac 549

<210> 178
 <211> 400
 <212> DNA
 <213> Ctenocephalides felis

<400> 178
 gatncttgaa agtccgaaaa ttattaatat cattaattaa aatggaccag ggaaaagcac 60

cagttcgcgt ttcacctctg atcaaattcg gaagggtggag ttttctcgtt gtcggaatat 120
 tatatggagc agctcaccaa agcaggctgg caaaacgcga agtaggaatt agagaagtcg 180
 aagctaaaca taaagcaatt cgggatgcaa aattagctga ggaaaagaaa cgagctcaag 240
 aagaggaaaa caaatacttc gcttcacttt aaacagatta gcattattaa ataggaaatg 300
 cagtaacatt caccataagg cattagatgt gctctgtaaa ttattcggat tttatgtgaa 360
 ataaaaagtt attatacata caaaaaaaaaa aaaaaaaaaa 400

<210> 179

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 179

atcagccact gcttctgatg ctgccctct tcaatatctt gctccatact ctggatgtgc 60
 tatgggtgaa ttcttccgtg acaatggaaa acatgctttg atcatctatg atgatttatc 120
 caaacaagct gttgcttata gtcaaatgtc tctattgtta cgtcgtccac caggctcgtga 180
 ggcttatcca ggtgatgtct tctaccttca ctcacgtcta cttgaacgtg ccgctaaaat 240
 gtctgaagct catggagggt gctctttgac tgccttgcca gttattgaaa cacaagctgg 300
 tgacgtatca gcttatattc caactaatgt catttccatt actgatggtc aaatcttctt 360
 ggaaactgaa ttgttctaca agggatttcg accagccatc aatgtaggtt tatctgtatc 420
 tcgtgtaggt tctgctgcac aaaccaaagc catgaaacag gttgccggtc catgaaactg 480
 gaatagctca tatcgtgagg tggctgtttt gccaatcggg ctagatcttg atgcancacc 540
 aacaatggt 549

<210> 180

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 180

gttaatatag gattcgttgt ttctagaacc acaacaaatt aaaacacacc aagatgttct 60
 cagcagcaaa attcatcgcc ccagtcgcc aatccgcatt tgtcaatgga tcaaaggcat 120
 atctgcgacc aatctcaagt gcagtattga ctcaaagctc tactatcaat gtattacctg 180
 cagccgctca atctagcatt ttaccacaag ttcgttgtct gcaaactaca gcagtaacga 240
 aagacattga ttcagcagct aaatttattg gtgctggagc agccaccgta ggagtagcag 300
 gatcaggagc tggatttggt tcagtctttg gatcattaat cattgggtat gcacgtaatc 360
 catcccttaa acaacaacta ttctcatatg ccattcttgg atttgattg tcagaagcta 420
 tgggactttt ctgcttatga tggctttctt actgtattcg cattctaatt tggttttcat 480
 ttgcccggaag agggctctaga agagtgcna cgtatcacca ggactgtatt aatcattcaa 540
 atccattant 550

<210> 181

<211> 498

<212> DNA

<213> Ctenocephalides felis

<212> DNA

<213> Ctenocephalides felis

<400> 184

aattcttggc tataagttcg ttgcatgttt tgcaagtgat ttgtttattg catttattcc 60
cgtggcatat ttacatgaa tcagagtttg cattacaatc gttaccctga tctgatttgc 120
atcctcgagt aatgacacct ttttcaattt ttgaatagca gtcgtccttt ggattcatac 180
aaactttggc cttcgtcttt cctgcatctt tgaaacattc gtttcttagt tctggaagtt 240
tttgaacgtt acaaccgat ttctcgcaac acattttttc tcggttagtc ggtcacaac 300
tttctttaac cgt 313

<210> 185

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 185

tatttgatct aaaagcagat aaacactttc tctgtttttg actgcttctt tatcggcctc 60
ttgtcctaatt cttagtaaac ttgatgatgt tagtgctaaa aattccttca tcctatcttc 120
aatatcacc cgtccacaag tagtaaacaa agcaccaaaa atattattaa tggctaaagc 180
catacaatgc atattgttag tatggccttc caaacttgct cgggtanaaaag attgatoctt 240
tcttgctaatt tttggaatag aaacagctac aaaaaccatc aataagcata ctaacaaatg 300
ttcatcctcc tcgtgttctg acttctgctg cctcaaagca tttgctanag ttggatctac 360
tttacaagtc aaacctgctg cggatgacat ctcaagaaac aattttcatt gggctctccac 420
ttggcaatga tgtttaatgt ccttgatan aacttataaa aatgggtatac gctgttctaa 480
cacgtctact anagatct 498

<210> 186

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 186

aaaacttcaa agaacattcc atccaatgga ttttcaaaca ttctcatcat acggtagttt 60
gatataggaa aattaacaaa tacaataaca atatattaaa ctattcatat tagttatact 120
atttatttct taatccacaa gttcagagac ttcagtaatt gtagcatctg ctaacatgcc 180
ttttttgtca ccagttatta catgaccaac aataaaagct ttttgctttt caagctcata 240
aatctcttta atatatcctt ctgcatctgc ttttggtaaa gctattaata ggctcctga 300
agtttctggc aaatatcctt ctgctagctt aaacattttg ctgaagattt tggcaacttc 360
ggaacatttg taaaaaactg gtagtttatt caatacaaat gaaacattat ttttctgatt 420
ctgggccaaa ttatcagcat gaccgagaat tccaaagcct gtgacatcag tagcatcatg 480
agcattatat ttatgcaa 498

<210> 187

<211> 498

attgagctc

549

<210> 190
<211> 550
<212> DNA
<213> Ctenocephalides felis

<400> 190
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tgaacagaac aaccttgact cataaccaa tggcacatat ttgtctttca attgcagntg 120
gattggttca cttacattca gaaatttttg gaacagaggg cgaaggtaaa ccagctatgg 180
ctcatcgtga tatcaaatca aagaatattc ttgtgagagt aaatggaaca tgtgttatag 240
ctgatttttg tttagcagtt acacatacac aatctacagg agctctagat gttgcatcta 300
atccaagagt tggaactaga cggatatatg ctctgaggt tcttgatgaa agcatcaaca 360
tgcaatgctt cgaagccttc aggcgcgcgcg atatctacgc tctgggtctt gtctatggga 420
ggtcgctaac agaactcttt cgaatggcat tgtgaagaat taggccacct tactacgacg 480
tcgtgccttc tgatccaagc ttgaggatat gcgcaaagt tctgcgtgcc acacagacca 540
gtacacctac 550

<210> 191
<211> 492
<212> DNA
<213> Ctenocephalides felis

<400> 191
gcatgtggta acatgtttca actgctgcaa ggacattcag cagaaacttc tggaggtctt 60
ttgatctgcc tcccaagaga acaggtgca gcttattgca aagacattga gaaacaagaa 120
ggttaccaag cttggatcat tggaattggt gaaaaaggaa atcgcacagc aagaataatt 180
gacaaaccta gagttattga agttccagca aaagattaga atgataatga tatgattatt 240
taattacaga atgaaataaa ggggtgtatg ctgtgtcaac attatgctag ttaaacaatg 300
gcatctcatt cctgctattt gcaatgcttc aatatttttt tgaaacaaat tgttctatta 360
atgcaaattg agattttaag aatatatata gataagaatt attgttttaa gagtaatttt 420
gaatcatgaa gaaattttctt gatttttcaa ttcttaataa agtcaaaagt aaaaaaaaaa 480
aaaaaaaaaa aa 492

<210> 192
<211> 479
<212> DNA
<213> Ctenocephalides felis

<400> 192
tttttttttt ttgggaagtt caattttatt tatgaatata gtatttagaa cttcatcaga 60
tgtggatatt gggaagattt caaaccaaac atagctgaca aatatgtata caaaagtttg 120
tggctctgggt gcttcttgat tactcctaaa accattttgt ctacaagctt ttggtcattc 180
ttcctttgct cagttgggtt ataagcctct ttcttggcag caaaaatatc accttcctct 240

aggcgatgat ccatgccttt gatgtggact cggcagagga tgctgagctg tgggaatact 300
accttgattt gacatcctat gttgtatcac agaactcacc ggt 343

<210> 196
<211> 749
<212> DNA
<213> Ctenocephalides felis

<400> 196
tttttttttt tttttttttt ttttttttag actatagtgc tattttattct ttagcatttt 60
ttgatgttac attttttaca taataccaag taaaataatg acttcattca tataataaag 120
ggtttaatac gccgatttaa aaacagacat cttatacaaa attaaaatgg ctgctgntaa 180
attatagaat atctttttag ttaaacaata tctaaatagt acataaaact ggacattact 240
tccattatat atatagatat atacatatgt atgttaatgt atatatacat aaatacatat 300
agaatcaaac aatatcaca actgttgatt tgaataagtt gctattcata aaattatgtt 360
ttcgcattha gtacattttt tgtatgtgct taagatgtat ataaacacat atttgntaat 420
tagtaaaaat taacataagc ttgagacatt attaggtgct actaaaattg ataaatattt 480
acataaatta aaacaatttc aattcctata tgtgtggnag taacttcaaa atctgnggaa 540
atattgggta aattgggtact ggnctgnaaa taatttacta aacagaaatt atattgactc 600
ctatctggca ttggcttctt aaccatttta aatttaattt acttaatctc ttcagaaata 660
gcttaataag gngagacacc ccagganaat tgggtggataa atattggtaa aagctcaaca 720
ggaacattgn gacctgaatg gctggcaaa 749

<210> 197
<211> 210
<212> DNA
<213> Ctenocephalides felis

<400> 197
ggaagcacct taggctgtgc aggacatgta actgtatagc attttgtgcc cagagccata 60
gggccgcaat tatgacgtaa cggtatcatat gcaaaatttg cggggcaata atattggggt 120
cctatactat ttctgctaca ataataatag ctttgacaat cttttatatt tggataaaat 180
ctcgatgggt acggacattt gaaaccttgt 210

<210> 198
<211> 185
<212> DNA
<213> Ctenocephalides felis

<400> 198
accacgaggt gcaggcggaa ttccagttaa atcaaagggt cctaaacgat tggtatcttt 60
ggtcataacc ctttctcctt catagacttg aattgttact gcaggctgat tgtctgcata 120
agtgtgaag gtttgtgttc ttttacctgg aattcttgca ttgcgttcaa taatcttagc 180
cattg 185

<210> 199
 <211> 223
 <212> DNA
 <213> Ctenocephalides felis

<400> 199
 cacggccgag gggttcagag ttgtcagtct taactgtgaa ggaacctcct gcggaagatt 60
 cccaaaggta ttgttcatca tcattgtgct tagatgtgac cgtgacttta tcagcaacga 120
 gataggccga gtagaaacca acaccaaatt gaccaatcat actaatatcg gctccagctt 180
 gtaaggcttc catgaaggct ttagttccag acttogcaat tgt 223

<210> 200
 <211> 465
 <212> DNA
 <213> Ctenocephalides felis

<400> 200
 cgaaagataa ggactccgat tgttctgaga gcgggctttg gggcaatgtg gaggcgcagg 60
 ccgccttcct ggggcctaata atgtgggata agacattacc ctatgatgct gatctcaagt 120
 atgtggatct agatgagttc ctttctgaga atggaatccc tgtggatgga atgggtcaca 180
 gcggtggatt ggggtccatg agtcacttag gtggcttagg aggatctcat aggtctgagg 240
 ctttaggtca ccttttgagt ggtatgccaa cacatctaac aaagattgaa agatcacott 300
 caccttccga atgcatgagc ccgatacta tgaatcctgc ttctccagct gattcaacat 360
 tctcaatggc ttcttctggg cgagattttg atcctcgaac acgggctttt tcggatgaag 420
 aactaaagcc tcaacctatg atcaagaaaa gtagaaagca gtttg 465

<210> 201
 <211> 312
 <212> DNA
 <213> Ctenocephalides felis

<400> 201
 attcttggct ataagttcgt tgcattgttt gcaagtgatt tgtttattgc atttattccc 60
 gtggcatatt ttacatgaat cagagtgtgc attacaatcg ttacctgat ctgatttgca 120
 tctcagagta atgacacctt tttcaatttt tgaatagcag tcgtcctttg gattcataca 180
 aactttgggc ttctgtctttc ctgcatcttt gaaacattcg tttcttagtt ctggaagttt 240
 ttgaacgtta caaccgatt tctcgcaaca cattttttct cggtttagtc agtcacaact 300
 ttctttaacc gt 312

<210> 202
 <211> 209
 <212> DNA
 <213> Ctenocephalides felis

ttcttgtatt caacttcaat tttaggtgtt gt

452

<210> 206
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 206
tnnttttttt tttttttttt tttttttttc tgacgttgac acatccattg cttcaccact 60
tcctgacgca tcaccagaac ttaacttacg tttttttgta gggtcttcag acccgtagt 120
agcagattga gaagcctctt gttcatcccc cgggtctttc ttaatactgn aatctacgta 180
tccagtaagc cattcctttg gtgtgttttc atttggctct cegtgtttgt ctagtttgcc 240
tgcggtatc aaagacttct tttgtgatgc cttaggtcct aagccccatt ttctgggata 300
tgtatntcgc tccattatca cacgttttaa tttagcacag actccatggt cgcagacat 360
cattgttgct gnggtcatta gagcgattgc taatgcaata gcttctccct tagtagtaac 420
aataacaatt tcctgattca tctcgattcc atcttcatac ctcaagacgc cggnaacata 480
actttngacc gnnacaaaca 500

<210> 207
<211> 264
<212> DNA
<213> Ctenocephalides felis

<400> 207
acgtggtaga aattctagaa gttgccaatt tcttctgtcg actagtccga atggtgtgtt 60
ggttacccat tcgtgatcat actggttcag aagataacaa ccgacagtca tgccctccaa 120
aaagatcaat ccaatggctc cgatggagaa aaatcttccct ttacatttgc agctgggttc 180
agtatacaaa tattgacctt ctatatcttc tgattttttt aaaagtgggt gttcttggtt 240
gccttctgat ggtggttgtg ttgt 264

<210> 208
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 208
atttccttgt gctaattcaa ttgttcgggg atgaagtgcc agctctggaa ccccttgaac 60
aacttcagaa accaaatcag caactctagc ctgacttgtc tgtgaaccag nttgtccagg 120
tgtgttagca gaactttgaa tgataagatt ttggttggca gcaagactct gtccacacat 180
atttctccgt ttatgagatg ctaaatcatt acitttgggca aaagctctac cacaaacct 240
acaagcgtag ggcttttcac ctgtatgtgt cctcatatgt atagctaact tatcagatcg 300
tgcaaactct ctgttacaaa cactgcatac aaatggnttt tctcctgnat gttttctcat 360
atgcaatgna agatctgtag ttcttgata acctttacca cagattttgc aaaaatttgt 420
catttgacca gtatgtctcc gcatatggac ggntaaatta cttcttgact gnaactttta 480
ccacaaacac tgnataat 498

<210> 209
 <211> 470
 <212> DNA
 <213> Ctenocephalides felis

<400> 209
 aatcagatta cagcttattt cacaaaaaat gagaaatnaa gaatccacaa ctaaatacaa 60
 tatgngtaaa caagataaaa atataactat aaacaaaata taaatcaagt taatcttgaa 120
 cataattaaa taaacttttt gtcaaaaact acagtaaaaa taataaaaac atttcatata 180
 aatgtaaaca aaattgatga tcattgataa ttcttgtaa atgtgctttt ttaaagcaaa 240
 tttatttaca tattaacat ctgtgaattt tgataattta tctcgtagca tcatgttttc 300
 tttcttcatt cgctcaagct ctggcggaag accaatattc tcttctcca agtatcctgc 360
 acgtaaggct atttgatttt ctttcatgcg tcgagcatct cgagatcgct tggctgccat 420
 gttattcttt ctctcttagc ccaatcttat catccttcaa attatcaggt 470

<210> 210
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 210
 ttnnnnnntt tttttttnnn ntnnttttgg acctgaaaac tatttattat cacatttatt 60
 naattacata atgattacna ctttaacaact attcttaaatt tctagtcaga tatcagnat 120
 ataataaata ctttaagcttt tataagaaaa aatgcatcac tagataattt tttcagccct 180
 tattcgatta atttttaattg ctttggttaa tcaacttctt ctatcgttgg cccttgccct 240
 ccaccaaagc ctccggcttg ctgccacaa gtttgtgctt gtgctccact tgaattggct 300
 tgatgtagct tcatcataag cggcgtaaca atctgttgga actctttctc tttttgttca 360
 tattcatggc attctgcttg gggattctga tctatccaag anaatatatc atcacatgcc 420
 ttgcngetg gttcacatc ttgctgngga agcctgcttc cacatcggcc agagcttggt 480
 ttacttgnaa gcataatcctc 500

<210> 211
 <211> 263
 <212> DNA
 <213> Ctenocephalides felis

<400> 211
 ttcatttcag gcataaattc tgttgttttg tgaccattaa taacatcaac ccctggtaac 60
 atatgaccag gccagtgta gtgccctggt tcatattcaa atttcacagg tgtgctcaca 120
 tgtggagcta aaggaggagc cagagatctg agatgatttc cattagagga tgggtgactg 180
 ttttgttctt ggaagtatct tctggcaaac atatggtgtt tcttctgagc aacaggaggc 240
 tggcgcgagg atatcgaggc ggt 263

<210> 212
 <211> 244
 <212> DNA
 <213> Ctenocephalides felis

<400> 212
 atggtgctggt gaaagcaaatt taccattaaa atatgtatattt cccacacaaa atgggaaaaa 60
 ggaatttttgc tcggagacct gcattgcaga attcaggaag gcttatagca agggagcctg 120
 cctacaatgt gataatgtaa tccgaggaaa ctcatctacc agtcgagagt tttgttctac 180
 cttttgtatg aacaaatatt aaaaaaagaa tgataagaat ctcataaatt taccggttac 240
 gagt 244

<210> 213
 <211> 418
 <212> DNA
 <213> Ctenocephalides felis

<400> 213
 atcatcagca aaaccagcag ttttaataatc agttaaatca acaaaatcaa caagtaaattc 60
 atcagcaaaa ccaacaattt aataatcagc tgaatcagca attgaataat caacaaaattc 120
 agcaatataa taatcagaat caacaattaa ataatcagca aaaccagcaa ataaatagta 180
 atcagataaa tcaacaacaa aataatcagc atgttaacac acaacaacaa aatatatctc 240
 aaggaaagtaa gcaagtaggc cagggaatc aaattccaca ggtgcagcaa cagcaggtgc 300
 cgaccatgta gcttctgtga atcttaacaa taatattcca cataaatctg gggaaattca 360
 aaacagtgtg tagacagtat acaactcctg agactctcta ttccaagcaa gaccccggt 418

<210> 214
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 214
 aacgtaaaga caaaggtaaa tctcgtttca cagcttatat gctctgggct aaaggaatta 60
 gaaataaaat cgtaaaagaa aatccttcaa ttgatttttc atctatatca aaaaaattag 120
 gtgaactttg ggcaaatgtg cctaattggag agaagtataa ttggcgctga agggctaaac 180
 gtatggctat gaaagtagcg agagatgaag aaataaaaac atctgataat aaagcacaat 240
 ttataaataa aagcaaattc aataagccct cccaattctc cacttcacca acagtttcta 300
 agaaacttga tatagaagat ttagaagtga tgcctaattc ccaacaaaat tctgataatt 360
 taatgttgag ccccaaatca tcagcaatga gcagcggttt atcatctcaa ggcaggtata 420
 aggtaacagg aagttcccca attgacatag ctgcttatct aaagttactt ggcgagaggt 480
 tgagtattat tggnggac 498

<210> 215
 <211> 398
 <212> DNA

<213> Ctenocephalides felis

<400> 215

gccattgcag ccactactga agttgaattc aaagaagcta ccacaattaa ggaatacatt 60
aaggatccca gcaagtttgc tgctgctact gctgccgctc cagctgctgc tgctgcagca 120
cctgctgaat ccaagaaaga agaaaagaaa gaggaatctg agtctgaaga tgatgacatg 180
ggtttcggtc tctttgatta agaacttggt ccacaatatt aacatttttg gaaatccata 240
tttatatgaa tatttacata ttcaagtctg tttgtgatta ttatctgtaa atacttgtct 300
gaactttgcg cagttctgtg gcaatttaca agattttatt tgtaagcata actttgtata 360
ataaaatatg gatgaggata aaaaaaaaaa aaaaaaaaaa 398

<210> 216

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 216

gagccatctt atcaaacata tttaatatata atttataata aatcgtgcaa agttttcatg 60
ttttaattaa aataccgatt gaggtaatac gaagtacaat ggtggataat aaattagcag 120
gattaacaga ggaaaagcta cgtgttttag taaaacaatg taacaaatgc ccgaaatgta 180
atgaaatttg tctagaggat tttcccgttg ttcaatgtag tttgaaccac agactttgca 240
agacgtgctt tttggcttcc ataaatgatc cttgcttcca gtgcactaag ggcagcaaac 300
catccgctaa taaaaagat cggccaaagc agccaaatgc cccagacaat tctttccga 360
aggtaaactg caaatatgcc agtgacggat gcaaaatctc aaaaaagaag gacaaaatta 420
gatttcacga atcggaatgt gtgtttcaac cacaagaatg tctggaaaat tcaactgttta 480
tttaattgta ctggccggta tttcaacgca tgctaccttt gtgagaacat cattaaatgg 540
aacacatga 549

<210> 217

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 217

caaacgtaca taagaatggg agcgattatt ttaagttcag attaaattgt atatactttt 60
gattcgaatg acgggacgaa tcatcacact cggagattgc agagagcttc aactgctgca 120
cttctcgaaa acaccaacga aaggttgccg gtggcgagcg actgcagcac aggccttagc 180
gtgcgttcgt ccagctcgaa cccgttgcaa gccagcgga gcaactagtgc tactatgatg 240
gcttccagcc gagtgcccag tccgcctctg caggagggtca acacaccgt agctgagaac 300
tggtgttaca cacaggttaa ggtagttaa ttcagttata tgtggaccat taataacttt 360
agtttttgcc gggaagaaat gggcgaagtg ttaaagtctt caacattctc agcgggcgcg 420
aacgacaaat taaagtgtg tctacgtgta aatccaaaag ggctagatga agaaagtaaa 480
gactcctcta ctgattacta ctgatctgt acaaatctga agtcggccaa ttaattctcg 540
atttaatgc 549

<210> 218
 <211> 547
 <212> DNA
 <213> Ctenocephalides felis

<400> 218
 ttttaacgata cacaacatga cactggcaga atcgctactt atgaagaaat agttgatttg 60
 ccgcagaaac cagaagtttt acttattgat gttcgtcaac cggaggaatt ggagcaggaa 120
 ggaaaaattc cgacggctat aaacattcca ttacgtgaat tggaaaatgc tctcaagaac 180
 atgtctcctg aagaattcaa aaccaaatc ggaagagata aaccaacatt cgatactgaa 240
 atcatttttta gttgccgttc cggaaaaacga gcaaaggaag ctatggaaac agcattggga 300
 ttgtgttaca agaaatcaag atactacgaa ggtagctttt tagaatggag cagcaagcag 360
 aagaaacagt gaaattgcag ggtaaatcaa atattttata tgatacacat attattttaca 420
 gatatgatca aactaagtat tcttgnggng ntatattagc atattgatat tttcttacga 480
 aatgtttctta agatgattta aaaatattgt gaataaattg ttacttttag attnnocctaa 540
 taaaata 547

<210> 219
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 219
 gtgatgtcat ttgtgcaaaa gaaacaaact gaatgggaac cggagtgggc tggagatgag 60
 agtataatgg cattaatgaa tgggtggagaa ttattttattt atgaaataga taaatgtgag 120
 tttggaacat catgggatgg aaagccaacc aaaaaaattg ggggaggtcg aaatggaaga 180
 ataagcatat caccatctaa tactacaacc acttttagctt tttatgtacc tgggtgcgcaa 240
 gctcagccat cgacttgcaa attattttgca tctcctaata tcagtcaacc agtagcttca 300
 aaaagctttt tccaggtgca caggggtgat tttttgtgga ataatcgtgg aacaaatcta 360
 cttcttctaa cagcaactga tgttgaccaa actgggtgctt catattatgg aaaacaatct 420
 ttgcagtata tgagttgcaa gggtgatact gnttggtcag tgccaaagaa gggctgtcat 480
 gcagttgcat ggagtcctaa gattagagtt tngtgggtac ggcattgcct gtaaaactcan 540
 tatcaatct 549

<210> 220
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 220
 gctntttaga cgttggaatc taaataatta aataatgata ccgaaaatat tattattttag 60
 taactaatat acgaaaaaag tatttttttaa attaagtaac atgtcagcat cagcaagcag 120
 atcggaaattt gcaatcacag aatctaacca acaagaagat gaatgtggac cacaattaat 180
 ttctaagata gagggtaatg gtattacaag tggggatatt aagaagttac aagaagctgg 240
 atactatact gtagaatcaa tagcattcgc accaaaaaag agtcttataa ctataaaagg 300
 aatatccgaa gctaaaagctg ataaactatt agccgaagct gctaagcttg tgcctatggg 360


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gtttacaaca goaacagaat ttcatacaaaa acgatcagaa ataataattgt taacaacagg 420
ttcaaaggag ctagataaac tattgggagg aggtttgaaa ctggatcaat aacggaagtt 480
tttggtgaat ttctgcaggg aaaacacatt atgcctacat tagctgnaat tgcagtacct 540
atagatcaa 549
```

```
<210> 221
<211> 549
<212> DNA
<213> Ctenocephalides felis
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<400> 221
cttgaataga ttatttactt tgcctttaa tttcaaagaa gtccctacgc gcaccaagat 60
gggtagggag gacaaagcca cctggaagtc aaactacttt actaagctcg tccaattggt 120
ggatgaatac ccaaaatggt ttattgtggg agccgacaat gtgggttcca agcaaatgca 180
acaaattcgt atgtctttgc gtggaagcgc cgttgtcctt atggggcaaaa acaccatgat 240
gcgaaaagct atcaaaggct atgttgagaa caaccaggct cttgaaaagc ttcttctca 300
cattcgcgga aatgtaggat ttgtatttac tcgoggagat cttgttgata ttcttgataa 360
attgttgaa aacaaagtgc gtgctccagc tcgtgctggt gccattgctc cattgccgtt 420
attattccag ctcaaaatac tggcttagga cccgaaaaga catctttctt ccaagctctg 480
ncatccaaca aaatttcaaa aggactattg aatcatcaat gatgtcatat cttaaacct 540
ggggataaa 549
```

```
<210> 222
<211> 550
<212> DNA
<213> Ctenocephalides felis
```

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<400> 222
gcgaggcgga nattgtnagt ncttttaagt attaacaatt taattaagtt tttatttaat 60
ttcgttattt ttttttaagt ttttacgtga aagactttga ggagtgattg nttatcagca 120
accaacanaa aatgggggtcc gagatgaaaa gtacatgcta caaatgcaat cgcgtangac 180
actttgccag agaatgcacc caaggaggcg gaggtatggg aggtggccgg gaccgcatg 240
gcggtcacag ggactcgggc cgcgtgcgtg agaaatgcta caagtgtaat agatttggcc 300
actttgccag agactgcaag gaggaggctg accgatgcta cagatgcaat ggcaactggac 360
acattgctcg cgcttgtctg caaagcccag atgaccatct gttacaactg taacaagcca 420
ggacacattg cgaggaattg tctgagagcc gtggtntgac tccagntagg tcaaccaacg 480
tgttcaactg cacaaaactg gtcataattt cgtactgcca gaaatgctag acttgatatg 540
tgtggaaagc 550
```

```
<210> 223
<211> 549
<212> DNA
<213> Ctenocephalides felis
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```
<400> 223
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<210> 226
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 226
tgaaagagat gcaggcattg tgggttgattc ctccggaaga ataaaaagtg taatttcagg 60
agaagaagtg gaaaggatag ctaacgaaac taaagttgag gtgttggaact acggtcaatt 120
ttcaatatgg ccagggtgtga tagactctca tgtgcacgtc aacgaaccag gaagagaatc 180
ctgggaagga tacaccacag ctactaaagc agcagcttgg ggcggaatta ccacaatagt 240
agacatgcct ttgaattcca tcccacctac aactactgta gagaatttga gaacaaaagt 300
gaattcagcc tgtggtaaaa cgcattgtga tgtcgctttc tggggaggcg tgattcctgg 360
caatgcgcac gaattgttgc cacttatcaa cgccggagta agaggattca aatgttttac 420
aagtgaaagt ggtgtcgatg agtttccaca ggttaactaaa aatgatctgg aaatggctct 480
aaaagagctc cagaaagc 498

<210> 227
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 227
cagccgttat agcggttgaa actgataata tccaaatgtt gtccaacttt atcttcatcg 60
actgccctcg acaatgctat tggtactggc cgtgaaacat cttaaacttt cacgtgatca 120
acgatagccg aaaaaataatc atccgatgcc gtaatctgag ttctaggttc atttgcaatg 180
gaccacatta tcaactcctgg gcgattctta tcacggcgaa ttagctcgct taacgacatc 240
ttgtgcttag caagcaattt tgaattgtaa ttctctgtat ctacacttgg acattcattg 300
attatcatga tgccgttttt gtccgccagg tccataactt cttccgaata aggataatgt 360
gatgttctat atgagttggc cccaatccat tttattaagt tgtaatcttt tgcaataata 420
gccaaatcga gaccttttca cgtatgtcag agtcttcatg tctacccaaa cctcttagat 480
ataatttcct gtgattaa 498

<210> 228
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 228
atgtccttga agtcctcgag ccgatgcaag ggtcccatcc agaccgcata ttctccggc 60
aatctcggaa caaaaagcgt gcttcgacct gttccgacct caacggcccc gaacagatcg 120
ggttccttag cgccaaacat gtattggaag taggattcct gtttaaaaat gtagcccaca 180
tccgtgtcgt tccagctgac ctcttcacct ccttgcagaa ggataatgga tttttttaag 240
gaacaacttt gtgccgataa agcatcgcac accttcttcc tgttctcggc gaataaactc 300
atcggaaactt tcagcgtttt tgggtccatg gagaagaccc gctgctgacc cgatccgttg 360
gagcacttgc atgttgattc tgccattatt cttttaaaact ataactactaa gogatttaca 420
caatttaatt aacaataatt actaaaaaaa ttaaattaaa cacatataac caaaaatttt 480

ctgtcactga acataagt

498

<210> 229

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 229

aacagttgca tgaactttgc ccttcaacgt cattcotaag tatggtggtt ctttattctt 60
gtgttggtt atgtcttttag tgaccttaaa ttcttctctg ggatcccaaa ttactaaatc 120
agcatccaag ccttctttga tttgtccttt tatgccatcc agtccagtta atcgagcggc 180
cgcccgggca ggtacttgag ttcccatcc aatcaatgtt actgcatcac ctttcttgat 240
aatatcagct tttcccaaag gaactgtgaa atcatcgaca ggaacttctt ctacagctgc 300
tctgtaaagc gtttttggtt ccagtagcaa acatggatct ttttctctga tcatggataa 360
tagaagacct ttggccatat ttggacctct tggtagtagca atcttcaatc ctggagtatg 420
tgcaaaatat gcctcanggc tttgggaatg ataacaagcc ccgtgtccga ctgcatacaa 480
ngtgctcgca ctgttaaa 498

<210> 230

<211> 237

<212> DNA

<213> Ctenocephalides felis

<400> 230

ctgctgctgc accgggaaca cccctgata ctggcgtatc acaaaattga gaattatggt 60
ggttcaccaa ttgtttaact tctttggcaa ctgctggatc gattgtgctg gaatctaaga 120
acaatgtatc ttttttggca gatgccacca ttcctttgta acagtctaact actatggcgt 180
tgtttggcaa cattgtgacc acaaagtcgg attttttggc aacttcggca gccgagg 237

<210> 231

<211> 171

<212> DNA

<213> Ctenocephalides felis

<400> 231

tgcttgaga aagtgcagtt ggaaaaagtt ctttggtggt aagatttgct aaggggcagt 60
ttcatgaata tcaagagtct actataggtg ctgcgttttt aactcaaact gtgtgtctgg 120
atgacacaac ggtaaattt gaaatttggg atacggctgg acaagaaagg t 171

<210> 232

<211> 315

<212> DNA

<213> Ctenocephalides felis

<400> 232

tgatagagtg catggccaat atgaatatcc aaaaatatta taggcctctc attacgatca 60
tcatattgcc caaaaagtggg tccgtgggtct cgtcgatgaa aaaattatgg tccacaaaaat 120
gatcaaaatc tttcacgccc atttgtctga ccagctctgg atctcgtatc agcaatacag 180
gttttaaaac ttcatagaaa cctgaaaatc tgctatcagg aaaattctca taagctcttc 240
cgtaggtata aatctgattt tccaactgga aaaagtttct ccaggtgctt ccaaggatcg 300
gcacaggttt caggt 315

<210> 233

<211> 247

<212> DNA

<213> Ctenocephalides felis

<400> 233

agaactactt gcatcttttt taggatgtct tttgccacac attctgcgga acatcacttg 60
agcaataaat attcataatt ttgcgaattc cttgatttta aacaagcgca gacataatgt 120
atgtatatat gtatatatat atatatatat attgaatggg agagtcttgg atttgtgtat 180
attttgtaga gtttcgaaca agaatccaaa aataatacaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaa 247

<210> 234

<211> 330

<212> DNA

<213> Ctenocephalides felis

<400> 234

tggtgaagaa tttgccggtc gcctagccaa agaaggaata cgatataaat taaagggaat 60
ggtagcagac ccagaagaat gtgatatgga agaattgggt agcatgaagt ctataccaaa 120
ttcacttgcg gtgttctgct tagctacgta tggtgaagga gatccaacag ataacgccat 180
ggagttcttc gaatggatcc aaaacggtga cgccgatctc acgggtctta attatgccgt 240
ttttggactt ggaaataaaa cctacgaaca ttacaatgaa gttgcaattt atgttgataa 300
acgattggaa gagttgggag caactagagt 330

<210> 235

<211> 417

<212> DNA

<213> Ctenocephalides felis

<400> 235

aattaaatgc aattatatca attctggcat aaatccaagg cactattttg actattttct 60
aattgcaaaa tatcaagtgt ttaataatgc aaaattttct taacagcatc aaagcaacgc 120
catttgtcgg gtagataaaa cggttcaaa acatgagggg atggtgtatc gtggccggtc 180
actctttgaa taggagcctc gagatgcaaa aagcattcct cctgaatgga agcagccagt 240
tcagccccaa agcctccagt gtatggagct tcatgtgcaa taatgcaacg accagtcttc 300
tttactgaat tacaacacgt atcataatcc catggtagta tcgaaacaag atcgataaact 360

tcacaattag catcaagttt ttcttttaca atctcagcta cttctcgtaa aacatgt 417

<210> 236

<211> 112

<212> DNA

<213> Ctenocephalides felis

<400> 236

ctggtttgca agtcattcca ctgggacatg tttccaatgt tgtttctaag aaatcagngc 60
caatcgcaat gcaaagggtt gctgtctcac aatcctggca ctttatttct cc 112

<210> 237

<211> 325

<212> DNA

<213> Ctenocephalides felis

<400> 237

actgtagtct cgtgaaatth gtttattaaa atccgaaagt aatggataat tcaaaccacc 60
taagccgcct acttttctat ccatgttaat ccatgctaag tggctaaaat gtgaatccgt 120
tgagcatcca acaacctcag caccgatttc ccgaaactgg cctattgcat cactataagc 180
acgaatctcc gttggacaga caaaagtaaa atctaagggg tagaagaaca ataccaaata 240
tttgccttta taatctgtta agctgatctt cttaaaatca ccattgacaa ctgccatacc 300
ttcaaaatga ggggctggac tttgt 325

<210> 238

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 238

tgaagccctn tgtgccggat gcgaggactg tgcaacggct taggtcctgc catgtttggt 60
gttatatttt atctttttca tgttgatttg aatgaagatc atcttggaaa taagatagaa 120
agaaatgaaa ctgctgggtgc agatgattat atacaattag ttcttgggoc tccatttggt 180
tttggagcat tgcttgtaat atgtgcactt ttagtagcag ttttcatacc agaagagcac 240
aaagatatata gccgacgttc ttctggtggt tctttagata cacattttga aattgaacgt 300
ggcagaaaag ttgcaagtcc tctaccacca ttgattcata ccgattctgc acagctataa 360
acatcatata ccatcaccac ctatgcaata caattttatt aataatgaat aattaattta 420
aaactagttt gaaacccaat ggtaaagat aatgaaataa ccagatacaa attacagata 480
ttttaaatga gatgtcatac 500

<210> 239

<211> 252

<212> DNA

<213> Ctenocephalides felis

<400> 248

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ctnagctcga ataatttcag tattatcacc caaaagttaa tttaaaatgc cgacatacaa 60
gttgacatac ttcaacgtta aggcctttggc tgaaccattg cgcttggtgt tgtcttatgg 120
aggagccgat tttgaagacg tcaggtttgga gaaggaaaac tggccagcag ttaaaaacac 180
attcccattc ggacaagtcc cagttttgga aatcgacggt aaacaaataa accaaagctt 240
ggcaattgct cggatatctg gcaaacaatt caacttgga ggcaaagatg ccttagaaga 300
tttggaattt gatgccatcg ttgattcaat gaacgatttc agactaaagg ctgctgtcgt 360
tatttatgaa caagatgaag cagtgaagc caagaaagtc gaacaattga ccaaagaagt 420
agtaccattc tactttgaaa aattcgaggc tatcgccaaa aagacaatgg catttagctt 480
tggaagaaatt ncctgggcag attcgtgctg ctgtcaattc gaacatggac ttatggccga 540
ctgttattc                                     549
```

<210> 249

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 249

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ttattatttt gttatatgtt cttgatgatt cttttggtat tctggttctt tctgganccg 60
tgatgtttac gtaatatata ccaaaacgct ctgtgaatcc acgaagccat tcaaaattgt 120
ctataatgct ccatagggca tagcctttta cattgcagtt atcaataatt atggctttga 180
gcatttcatt caagtaacta caaatgtaat gaactcnatc atgatcatcc aattgaccat 240
gatctgagta tccgttttcg gtaactatta tttcaattcc aggttattca ttttgaaccc 300
attttaaaag ttttcgaaat ccttctggaa caacttttaa ccaagatgat gctgcactgg 360
gccatgaggg gtccgattct aattttactt totgatcagt ataccaggtg ttcggctttc 420
ctgaaattgc attggatgct aggcgagatg tataatgggt taatccaaga aaatcagcaa 480
gtgcctttta tatgatca                                     498
```

<210> 250

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 250

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gatatgatgc agttgttaat tcaagctaaa aaaggaactc ttcaagacga tgatttaggg 120
gtaactgctg cacgaaataa agaattaaca ggcgatgata taacatccca agctttantt 180
ttcctcataa ctggagtaat aacttccact tcaacaatgg gtttcggggc ctatgaaata 240
gcaaacaacg aagaaattca gaaaaaattg atagaggaag tagatgaggt tagaagaag 300
cataaagggtg aattatotta tgagataatt gataagatgg attatttagg cagagtaata 360
tcagaaactt tgccgaaatg gccgccggga attattgcta ggaattgtgt gcaaccttat 420
acaatcacgg ataataaaaa tagaatcaca tttaattgcg atccaggagc tgtnatatat 480
gttcccacaa tagccatt                                     498
```

<210> 251
 <211> 175
 <212> DNA
 <213> Ctenocephalides felis

<400> 251
 cattctactt tgaaaaattc gaggctatcg ccaaaaagaa caatggacat ttagcttttg 60
 gaaaattgac ctgggcagat ttcgtgctgg ctgggtcaatt cgaagcatgg aactttatgg 120
 cccgcactga tttattcgcc aacaccccct cattgaaggc tgttatcaac aatgt 175

<210> 252
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 252
 ctttgacctt atatcatttt gcaccaagtt ttccgtcacg agcagcgctg ttaactatta 60
 gagcactaaa tcttaagggt gatataaaag aagtaaatct gtttgctaaa gagcaattta 120
 aaccagaatt tttgaagatt aaccacacac attgtgttcc aacattagat gacaatgggt 180
 ttgttccttg ggaaagtcgg gctatagcta ctacttgggt ccaggcttat gggggtgaaa 240
 aatacagttc cttgtatcct caagctgcta aagaaaaagc agttgttgat cagagattat 300
 actttgatgc tggagtttta tttcctagaa ttcgagccat ttgctttcct attctatatt 360
 tgggagaaac tacgatttca caagacaaaa aagaccaact aaatgaagca tttggttatc 420
 tagatgggtt tcttgcnaaa caaagtgggt agctggagac aactttaccg tacagataat 480
 gcattctggc ttctgttcta gcatacaagc tgtggttcga tatttcnaat ccctctgtgc 540
 tctgggaag 549

<210> 253
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 253
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 tgttaaacga gatggagaaa cacatcatat tagagaattt gaagttggaa ctcatttgaa 180
 acttgcttcg gatgtagatt acctaaaggg tgacaatgct gatatagtag ccacagactc 240
 tcaaaaaaat acagtgtacc ttttggtctaa ccaacatgggt gtgaataccc ccgaagaatt 300
 tggcttggtt ttatgcagac actttttgca cacctacccc catgttctag aatgcagtgc 360
 cactgtggag atgtaccctt gggaaagaat taagggtagt ggtcaaccag aaaggcagca 420
 taagcatgct tttattttta acccttcggc agtcagacat tgtgtggtac acagaaaaaa 480
 taogaactcc ggcgtcgaag ttgtttgaag gatctcgtgt ctcaaaacac gcatccgatt 540
 cctggntcg 549

<210> 254

aaaatattgc tgcaaaaatt tgtatcgagcagg ctactatccg atttcctgga 540
cactagagt 549

<210> 257

<211> 441

<212> DNA

<213> Ctenocephalides felis

<400> 257

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ccaaaggccc tcacagtcga caagccagct aacgatgccg caaggtgaga atatgcggga 120
cttcggggtta ttccttcaag acgtttaata ttttttgatg tttttaagta tattcttctc 180
acaaatatga aaactactcc aagaacgccg acagctatca aaaataatgg atttacagtt 240
gccgttaata ttaaagcgcc aactatagtc agtattatct gtgatgaatc aagcagggct 300
ttaggtaaaa attcatcaat agcgcccatg tcttttgaaa atctgttcat aatccgtcct 360
gaagggtttg tatcaaaaaa tcgcatagtt gtttgtaaaa ttcctttgaa catagaatca 420
tgtaatcntt gagaaacccg t 441

<210> 258

<211> 438

<212> DNA

<213> Ctenocephalides felis

<400> 258

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taatgtcgat tctaatacat catcagttcg aaatggacgg atccttgtcg atccttgttg 120
ccaccagat agatgatgtt cctggcccag gcacgacatt ccacgttgat caaacgtccc 180
actgtaggtc ttttgaattg aacagcaact aatggactaa gataatctcg ttgggttctg 240
aatggataat aatatccagc aaatcccatg cttggataca tttcaactgg gcccaaattt 300
tctcgatcaa ctggattttc tccttgacac gaaacccaaa tttgttttct ctcacccggc 360
ttgagacttt gtatgtgatc cttcaattcc ataggcatat cttoaggcag cgtcgccaca 420
tcatacataat aatccggt 438

<210> 259

<211> 323

<212> DNA

<213> Ctenocephalides felis

<400> 259

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tgaccaatgt gtatttgtca gtggcggaag atcttgccaa aacacgtaat ttaggccaca 120
ctttatccag cagatgttgt tggacatcac cgttgctgtc tctaatacgc ctattgaatt 180
cttttccttc taaaatcaga aaatcttctt ggggtttcaa tattccacat ttcgtagcaa 240
tagaccttgc agtgtttata ttatcaccag ttaccatacg aacagttatt cctgcttttt 300
gacatttaacg aatagcatca ggt 323

<210> 263
 <211> 344
 <212> DNA
 <213> Ctenocephalides felis

<400> 263
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 taagaactta taaccgaaaa agtagtgggt tgcgaaatag gccactgtgg gcactcacca 120
 ttggccctgt attcgtcctg gactttgtag aattctgcta attccttacc cgagcacaaa 180
 ggagatcga cttgggtagt ttcgttaaatt ctcgaataat cgacttcgta gcattgtctt 240
 tctttattgt agttgacgac tgggtcgaac ctgtggcccc acaatatttc cgtattaatg 300
 taacttgatc gagcttgtgt ggtctgtcct gtagattcaa tagt 344

<210> 264
 <211> 477
 <212> DNA
 <213> Ctenocephalides felis

<400> 264
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 aaaaatcatc aaatgagatc atttggtcac cattttgatc agcttctaga atagttcttt 120
 cggcaatgct tgacaattgt tcttcaactta tatttgcacc caccatcatg tgtaaaatgg 180
 caagaagttc atcccgagat atcatgtcat cattgtccaa gtcatacatt ttgaatgcaa 240
 atctcaattt ttcttccctg ctgttcaatt tattttcccg attcttctta atgggtctga 300
 aatgtgctaa gacttgcata aactgtaaga aattcaccct gtcacatga ctttgagcaa 360
 aaaatgcatg gacaatccta tcacctaagg gatttattgc gagttcgggt attctcaaaa 420
 aatcatctcg tgaaagagtt ccacagtctc cagcatctag agatgtgaat cttgagt 477

<210> 265
 <211> 377
 <212> DNA
 <213> Ctenocephalides felis

<400> 265
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 gtccctcttc anaacaaatc cnacaagata ctgagattct ctggaaacaa caactggata 120
 tccattgtgc tcagntnott tcantaaacc ttcaacatca tccacagtca tcgagtcttg 180
 agtgattaca cttaatgttt cattcctctt gggttgcatg acatctgcag ctaaagatgt 240
 atgtgcaaat tcatctttac tgccaagaat ggatatccat taagctgtat atgggcatca 300
 tatataccct gtctgccaaa gcatcaccaa cccatttgga agccatagct gctgccatta 360
 agggcacgat ataacgt 377

<210> 266
 <211> 222
 <212> DNA

<213> Ctenocephalides felis

<400> 266

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aggattcctt aaccggatct gctcctatct ccggacaata ctgcatttcg ggtgaactgc 120
acgaattcac gcaactaaat tttacttttt tacatttttg ctggggtttc ggtacaaaat 180
gctatacagt tacatgtcct gcacagccta aggtgcttcc gt 222

<210> 267

<211> 209

<212> DNA

<213> Ctenocephalides felis

<400> 267

cnaaagaggn ttcaggaagc ttttcttcgt cncctgattt tgganccoga gttgggttcaa 60
ccaattcacc aggatcgtga atctaataaa catgaagaac aattcaacaa gcaccatnat 120
nacaagcanc acaaagctga ttatatgaat cacatgagag tcaccgacac ttngngaate 180
atggctgggt cttttgctgt gatagcgggt 209

<210> 268

<211> 178

<212> DNA

<213> Ctenocephalides felis

<400> 268

aaccaactag agctaagaaa aaagccagcg atagcataga actgctatgt tccoctccaa 60
ataccactgt tgttttatca tataaaaatg ccatangtat ggagctaata catccaatca 120
ccatcaatat atatatatat atgaagagtc ttttatcctt cctgggtaaa gtttctgt 178

<210> 269

<211> 238

<212> DNA

<213> Ctenocephalides felis

<400> 269

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tgataaggca ttttaagaatt ttacaattta gattttttta aatccatgaa tatatttggt 120
ctaatacaaaa ttattcattt tacgcttaat tttattgggt gaactaatag atagatagat 180
aaaagatata gagttaatat aaaaatgaag aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 238

<210> 270

<211> 326

<212> DNA

<213> Ctenocephalides felis

<400> 270

cgcaaggatat ggcatatgct ttgttagcaa atgttattcc aacagcagga ttatatgtgg 60
ctttctttcc tgcattgggtt tatgtagttt ttgggtcatc cagacatgta tccatgggaa 120
catttgctgt agttagtata atggtaggaa aaattgttca agaatacgcc tattttccag 180
acgggtgtaga gaaaaatata ggagatacga ccacaattcc tgaccctgat gtgcaatacn 240
atcctacaga agtggcaacc gcagttacat ttctggctgg aatttatctg cttatcatgt 300
ggatttttcg totaggggct cttagt 326

<210> 271

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 271

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ccaacttggt gtgctttcac cagatcagca gtcagcaatg caagtgggtg tcgctctcca 120
atggcaggct tgtactcagg tactatgacg cttttagcgt taagttttct cactccatac 180
ttttactata ttccgagagc aactctttca tcagtgttga tatgtgctgt tatgttcatg 240
tttgattggc aaatagtgat gccaatgtgg cggactaata aattggacgt gttatttatg 300
gggtgtacat ttgctgcatc tttatataaa ggagtagaat ttggcttaag tgttggtgta 360
attctgactt tatgtccttt gctctatttg tgggcaaggc ccgaaattaa tcacatatct 420
aagtggacac ccgaaggctt tgaatatcgc gtgtatgcc agaccaggct tttactttcc 480
ttcggttgac tttttgaaan gagaattgcc aaagttcttt aaattttcng gtccttgatt 540
tagactgtc 549

<210> 272

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 272

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ccgggtcgta gtaaccaatt taatataatg gtcctccac catacgaga cttgggaaaa 120
caagctaggg aggtatttaa cagtggctat ctttttggtc ttttcaaatt gaatttgaaa 180
actaaaactg cctctgggggt tgaattcact tcaggaggaa cttctgaaca tgaaactggc 240
aaggattttg gatcttttga gacaaaatac aaagtaagt attacggtct cactttttct 300
gaaaaatgga acacagacaa tacttttagct acagaagttt ccatacaaga tcaaatagct 360
aaaggtttga aagtatcatt cgactgctct ttgcgaccac aaacgggaag caaaactggg 420
gttttgaaaa ctgcttctta catgatagtg ttgcagtaaa tgctgatgta aatttgaatt 480
atcaggacct ttgatcaatg ccagcgcagt agtgggttatc aagggtggtg ccggtatnaa 540
ctgatttnc 549

<210> 273

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 273

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ccagcgatga agcgacgcat gtaaatcata ccggggaatg ggcgaggccg cgcagcgagt 120
cggcgggcga ccctgacgac ggctgcggga acacgaccga ctcgaggagga acgtacgtca 180
aacgcacggg gttagcgtta tttctgtggt acgcctcatg cggaggagt tgcgagtgg 240
gcgtagcttg gtggcactca ggcagagagg aatactatga accagatccg gaagaaccgt 300
cagatcctgg atacgcgaact ccggtctcta tcgagaacgc gttgcagagc tcagtgtcga 360
gatgcacttc cctgaatgtg atacgcgacc catacatgac gacaacggaa gggcgaacct 420
cgcgctgccg ccgacttacc tcttcacgcc tcgtcgcgca actactcaag attcggttta 480
caccatctga tcaggctccc ggggaccaga caaagacgga caagatcgca cccttcataa 540
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<210> 274

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 274

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aaatggacga actgcagcta ttcagaggcg atacagtatt attaaaaggc aaacgcagga 120
aggagacagt ttgcatogtt ctctctgatg atacttgccc cgatgaaaaa atccgtatga 180
acagagttgt acgtaacaac ttgcgtgtcc gcttgtctga tgttgtttct gtgcagcctt 240
gtccagacgt gaagtatgga aagcgaattc atgtgctgcc cattgatgat tctgttgaag 300
gcctaacagg aaatctgttc gaggtctacc tcaagcccta cttcttagaa gcctatcggc 360
caattcacia ggacgacaca tttattgtcc gtggcgggat gagagcaata gaattcaaag 420
tagtcgaaac agatctgctt cttattgatc gtggtcctgc acagtcattc attgcgaagg 480
ggatccaatc aagcgtgagg aagagaagag ctcnatgctg cggtatgatg atattgtgg 540
gagaaacat                                     549
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<210> 275

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 275

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gactgaacca caaacaatt ctaattcatt taccgttgat caaatagaaa ttgacatatt 120
gccactata tatgatatca tacgaagtgt tgaaagagat ccacatgata gcgctggcaa 180
aaccagagaa tcacaagatt gcagtgtgaa ggtattagac ttacaaaaga agttagaaaa 240
aattcgaagt caagttactc agctacctgg aattgattat aataaagagg aacaacttca 300
atatttagaa acacttagga aacaattaaa acttaagcaa gagcttttgc acaaatacag 360
gactatgtac acatttgatt caatgaaaat ataaattgtt taaaatgcct ctgcgatctc 420
tcatgaatta tttgctgaat aacgacgttt agttcagaag ttgctgaatc ttatccagtc 480
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gaagagctgg cagttagcca ttctgctatg atagatcaaa atcaatttag ggacacactg 540
agaagctgg 549

<210> 276

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 276

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tattctatatt gctttgacga aaacaaaaaa ctgattagtt tattaataaa atagtatatg 120
ttaatatattg ctgattggcg atgacggcag agaaagcgga cttttccgac agtcttctga 180
gtcggacggg agagcaggtc cacagaccaa catttcgctc tcatgccaaa gactgtgcta 240
gtgcttggtg caccagaaaa acottagaaa ggcatctgcc tatagtaaat tggttaccga 300
aatacacctg ggaaaaatta ggcagagatg ccattgcagg tttgacagta ggtttgacag 360
caataccaca aggtattgca tatgctgtag ttgcaggact agaacctcag tatggtttat 420
atgctggttt catgggatgt tcgtgtacat attcctagga ggatgcaaag atgtgacata 480
ggcccacggn catatggctc tatggtgcac gctatgtcaa gactgggcct gatttgcaat 540
ctgcccttt 549

<210> 277

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 277

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ctattaccaa caattctttg gaagaattgt acacaaacac ttctgccaaa acagattcca 180
ttactctttt atcaaaaacc agtctacgcg ctgatcaaaa tgccacgatt gaaaatcctg 240
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tcttctgtgt ttgtgtgctg gctttaggga ttcttttaac tcatttcatg ttacaaacag 360
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taattaattt aatgtcgtct aaaaatattg caaattggag aatgaagaac cttttcacco 480
acagcgtttt cttagtgcgc tccgctataa tattgaatcc ggtatattgc ataaggnatt 540
ttttcaaat 549

<210> 278

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 278

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tataacttggg caatctgtat atcaactaac agttatatcc acactgcttt ttgttggtga 120

taagctctta gacattgact caggaagagg agcagactac ggttcattgc caactcaaca 180
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 tatttgggta ggaaccgctg ttgcacatgt tgcattgta caatacggag atctggcatt 360
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 natttagtg 549

<210> 279

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 279

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 tgtcagatga aatgcaagaa aacggaacta ttaatggtga agtgccagaa attgaactta 120
 tcattaaggc atccaccata gatggctgac gtaaaggagc ttgtttattt tgtcaagaat 180
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 gaatttgtct ctaaattgaa ntggtttagt caaaaaggat gcgtaaaaag caatagtctg 480
 tgaccctga ggaaaatcaa cgccatttgg gcggcgcgga cgagattcta cggcgaccca 540
 tgtntgntc 549

<210> 280

<211> 269

<212> DNA

<213> Ctenocephalides felis

<400> 280

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 catgagacca tcacgaatac aagaattgga agctttccca cagagttaat aatagcacct 180
 attatgggaa atccaatcgc atatccagct tccaacatta aagaatgcat aaatgcctgt 240
 tottccattg tgtctttaca ctccggtcgt 269

<210> 281

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 281

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caagagttga ttagaaaaact ctgtagacct gcacctgagg agagactagg atatcaaaaa 120
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 aagaaattat ttatatattt gtaacgataa tattgaaata aattgtttta tatttcgata 480
 atataaaaa 489

<210> 282

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 282

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 cancgggtta tgnntgtnnn ttncacacaa gcgcangcat actggggaaa actatgtnga 480
 attcantaga gtaccgtc 498

<210> 283

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 283

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 gcctgataac aaaagtttgt ttaactttt actattttta aatattctag tatcgagttt 180
 gttgatttta ttattactca aatctaagct gattaaattg cgcataatgcc agaaaatatt 240
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 aatttttaata acatccaaat gatcattatt ttggaagacg ttgtcaggta agaaagtaag 480
 tagattatgt gtcaagtc 498

<210> 284

<211> 129

<212> DNA

<213> *Ctenocephalides felis*

<400> 284

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gctttaagga aatgagagtt cttcctgagg gccaaaatta tataaaagaa aatctcgaca 120
atcctaagt 129

<210> 285

<211> 424

<212> DNA

<213> Ctenocephalides felis

<400> 285

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tccagattgg tattttttcta tcatttgagc tatacctcta tttgttataa tataatctggc 180
gtgaattaga ccatataaca tctctgcagc ttgttctatt gcactctgact gatttggatt 240
atcatctatt tcatcatcag gtttaaatct aatatcatat ccaaggcttg tctatatcgt 300
ggaatttgct cattaaggcc tgtagattg aatttatcct gtatatagtc ttcattccacc 360
tcgcaaaaga attcatttcc tcgtagacca caaaaccaag atatccatga gacctcctca 420
gaac 424

<210> 286

<211> 204

<212> DNA

<213> Ctenocephalides felis

<400> 286

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ttcgacatcc aaatgataaa cactatctaa tcaagtgatg ttgtttaatt aagcaagtgt 120
tagttcgaat tcatttttgt gttttgtgta tattataata aatggacccc gaaattcctc 180
tgaaaggtgt gactccgggt ttgt 204

<210> 287

<211> 446

<212> DNA

<213> Ctenocephalides felis

<400> 287

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tgttggtaat gtcacacag atcacagtag cagcaggaag gttatagggt gtcagattg 120
tatcctgggt cttgacacat gtattactga tgtttcactt ggttttctgt ggcaattgat 180
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ctatctgctt tcggtgactt atttccaaat ctgctaaaacg tttccataat tcatctcgtt 300
cgcgctcgcg tttcttttct tctgtcgttc tcttttataa cttgcagtca attcatcaaa 360
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gattccaagc tcttttgaaa tgcggt

446

<210> 288

<211> 268

<212> DNA

<213> Ctenocephalides felis

<400> 288

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ttcaaaaact tttccgagag gtgcgcacatca tgaaaaatgtt ggatcaccca aatattgtaa 120
aactgtttca agtgattgag acagaaaaaa ctttatatct agtaatggaa tatgcatcag 180
gtggtgaagt gtttgattat cttgttcttc atggtaggat gaaagaaaag gaagctagag 240
ccaaatttag gcaaattgtt agcgtctgt 268

<210> 289

<211> 465

<212> DNA

<213> Ctenocephalides felis

<400> 289

cggcaaagt ccaagctttt ttgcctggat ccacacgttt ggcaaatacca aagtcgacca 60
gtttgatgta tccttttagta tctagcatga gattttcagg ttttaaatca cggaagatca 120
tatttttgtc gtgtaaatat tcgaaagctt caataacaca agcgggtata aatctagaag 180
ttttttcattc aaaacatttt gctttatgca acgccgtcca gacatcacct cccagacatg 240
cttocattag gaaatacaag tatttggtat ctttatatgt gttgtataat ctgcatataa 300
atgggctgtc acaactagcc ataacatgct tctcattgta aacgtgctgc tgttggtgct 360
gctgaacaat atcaactttc tggagacatt ttagagcaaa tgtcttgtct ggtgtggatg 420
gatgactgac ccagttccac gcgaccaaat ccgcaacgcc caaag 465

<210> 290

<211> 294

<212> DNA

<213> Ctenocephalides felis

<400> 290

ctatatctctg gcttttctaaa tactccatgc cgtcaataat ctgccgacaa tatgtaggga 60
aaagtctctc gtctataata atattctctt tctctcttaa ataatgcaac aaaatgtagt 120
ctagtttttc agtaatgatg taatgttttg gagtttcgat ccaggcaaga acttgctgta 180
tatttggtatg tttcagtgat ttactttaat ttatctctct tttaaaattt tcatgttctt 240
gactttccac gccatctatt gtggttggtta ccaagagtgg ctttctcgaa atgt 294

<210> 291

<211> 203

<212> DNA

<213> Ctenocephalides felis

<400> 291

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tacaagcttc ttacgcaaatt tttcattgga gtccaccaaaggccattta aaacgcaacg 120
aaaatgaatt tgatgcgga cttcgagaaa cattagagga aacaggctct tgcaaaagcg 180
atattaaaat atttaaagat tgt 203

<210> 292

<211> 283

<212> DNA

<213> Ctenocephalides felis

<400> 292

catcactgag aagaactctt cggctacgga atatcttcat tggaggcgcg ttgttggtgc 60
acgcagcatt aacaaggctt ttgcaattca gcataatgac cagaagaaaa atacagggtac 120
tgcttttcat tttgattcag taatagatta cttcttgaga tagataataa tactgtggag 180
aagtaacctt cacatgaaat aggcttgggt cttataatta ctggctttgt tctggatatt 240
agaaatctga tcacaaaatt ttattaagtt attattatgt taa 283

<210> 293

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 293

agnnttgctg annaancct nannaagctt cntcgagngc nngaattcgg cttagcgtgg 60
tcgcggggcg ggnacaagt atcaaactg ggctacgggg gaccgtaga ttccaacat 120
tctacaagg ggcncnttct ttantaaaat atcatccaga ttttcaaac gaccgatgga 180
ttngcccgn tnaaaaccag gcacacctg aactaacgct ttagttagcg gnggagngg 240
cacaatgcag gatgaccag tcaaacgag gnccttgagg gtcacatggn ccatgaagac 300
cacaagcagt agggacccn atgagataat gtntgaaatt cgaaaagttt tggatgcaa 360
tggatgcgat tatgaacaac gtgaaagggn tttactact tgtgtcacg agatctatca 420
cggatagttt agtacaatg gaaatagaag tctgnaaatt ggcaaacttt ccttgatgg 480
aggtcgattc aaacgcattt 500

<210> 294

<211> 302

<212> DNA

<213> Ctenocephalides felis

<400> 294

actgtcatca togttaact ccagtaatat attatctgat ttcagatctc tatgtgcaat 60
tccataagct gataaatgg caatcgcttc caaaagttga gcaaacaaaa ttatggacgt 120
cctcattgat attttattac tactaagata atcatgaaga ctgcaatcgt atctcttcat 180

taacaaaaac aatgacatat ttctaccata accatcactg ttaattcttt gtggtaaagc 240
 tgatggaaac aaactggctg ctagtggtaa accagttgga attctatcag caaacacgct 300
 gt 302

<210> 295

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 295

aagctttctt tttttttttt tttttttttt tttaaatcgg tccaaaacca tcattggntt 60
 attcattngt agaaatngag atgttaaaat tgactccaat cctnttaata atatcggtg 120
 ctaccctact tccaaattct gaacaagttt gtaaagtatt gtctgcaag aatttatata 180
 agaagccagc gaggaatgca tcacctgcac ctgttgatn ttttataagc gccgatggaa 240
 ttttctcgat ttcaacagac cattttgcaa atcttttcat cttgttggtt aaatatggta 300
 actgggtttg aagcatcagt tgctacaact atcttacttt tgaagctagt gcatttcttc 360
 tttagaggct tgtaaaactt aatcaaagtc tccataacac tatccaagtt attgaaatta 420
 taagccttgc ctaattctaa aaattgctca gcggnntcca aagactacat ctgcagattc 480
 tgctagcgnt tttacatt 498

<210> 296

<211> 227

<212> DNA

<213> Ctenocephalides felis

<400> 296

cactacctat tgatcctgct atgtttccaa cgtggcctgc aaaaagtga cttggaacaa 60
 gacgtgcact tgccagtagt cctaaaccac cttcaggagg tgaccagttt aaaacattgg 120
 gggaaggtga aggagccgat gcgtattggg gtgaacgagc atctttgttg gatacaagaa 180
 acattccaat ggggtgcaggc ttctcactca agttttaata aattcgt 227

<210> 297

<211> 452

<212> DNA

<213> Ctenocephalides felis

<400> 297

ggcacgaata tttgtcttca taatcattac ccgctcttgt atattgagtt ttagggatca 60
 acttcttcac ataattctca tttataaaac gttggaacaa aactccaaat gttgttttcg 120
 ctttcgaatg tcgaaatagt gcataaaatt catcgaagtc caaaaaccgt gaatgattag 180
 agtcacccaa actcataaga tactgagtcg cagattctgg aaactcatta ttatattcac 240
 ttctctctac aattctttgt aattctctga cagatatcaa gttatcatta tctgtgtcat 300
 actttcaaaa tacaattaat tattgttaac gtgcatacat aaactttgat ttattataat 360
 tttacottcc cgaataggta tctgatatat tgatcagttt ccctcaacgg tatattatat 420
 tccatctcta attgtgatat ccttctctga gt 452

<210> 298
 <211> 138
 <212> DNA
 <213> Ctenocephalides felis

<400> 298
 ttagatacaa gtatttctga tgatcttagg aagtatagaa cctactctgg aagtaatggt 60
 agagatttat taagagctat aaggaataag aagcatcatt atcatcaact ctacacctgat 120
 gcattgaaag ttttgggt 138

<210> 299
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 299
 aatcattctc tctgatatgt gtatcaaaat ggcgctatca actggccaaa ttgatgtcct 60
 tcacaatctg cacaaaatta gagaacaaag ggccaacttg gtggacaaca ctaatcaatt 120
 caaaatagtt catatgcttg ttttggaatg cttatttggg gagtctacaa gtattccatg 180
 tgaacatttg ctaaaaactg tagccgaaat gaaaagtcgt aatgaaatgt tcaaaatgtg 240
 gaaaaaaata gacgatgtcg catggaaaga tgacttcgtt aaaggaatag acagtgaacc 300
 atctcaagaa gatattgcga gaaaagagaa tagaaataaa attgtgccag gaagacgagg 360
 tcgtgtatgt ttgtcaagat ttccattgac aaaagcagat tcggattata taaatgcaat 420
 atttgtagat ggatttcaaa caaaacgtca atttatcggg acgcattttt ctttacatca 480
 tacagttgct gatttctg 498

<210> 300
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 300
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 ataataatatt taacaattta taattcaatg ggtgttagaa ctgcatgcag gntatttaat 120
 taagaatggg cgcttattta tccaagcctg ttgtggaaaa gcattcgagc gatgaatcga 180
 ataacatatt aacttgtgca gntagtagca tgcanggatg gagaataact caagaggatg 240
 cacataacct gatattaaac tttgacaagg atacatcact ctttgctgtt tatgatgggc 300
 atgggggtgc cgaagtggct aaatactgtg ctgaaaagtt gcctgattcc atcaaggaaa 360
 ctcaagctta taaaaatggg gatntancac aaggtottaa agatgctttc cttagtntng 420
 atgctccatt gcagaanaaa aagtcattga aataactcaa aattatccac tttgataatg 480
 acattaacan gcaagtcagn tgaatggact gangatgacg gtattanatg atcctcagaa 540
 tctgngaag 549

<210> 301
 <211> 547
 <212> DNA
 <213> Ctenocephalides felis

<400> 301
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 ataagtgaat tttatacgaa taacttagaa ttatatatta ttttattgag tgcattgtgtg 120
 tgttcgagaa gtctcaaagg tcaatttgat aaaagtacaa gactacctgc aagatttttg 180
 taaagaaatt atataataag tgttttatta atatatatta tacaatggct ttgaacaaat 240
 tgagtatcga gagtgtggat ttggaaggca agaaagtctt tatgagggtt gatttcaacg 300
 ttccgttaaa aaacgggtgt atcacgaaca atcaaagaat agtggcagct ttggatacga 360
 ttaagtgcgt ttgaataaaa atgctttgag tgttattctg atgagccatt taggacgtcc 420
 tgatggcttc taaaaaggaa tacagtttga gacctgtgcg aggaattgaa gaactattaa 480
 acagggatgt gcatttttgg aagactgtgt gcccacaaagt agacaagagt gcataatgca 540
 agcaagg 547

<210> 302
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 302
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 acagagccta ttccgaacga tgcaccgatc aaattttata cttggattat gaaaacattg 120
 ttagagtggg taaaccagga acaaggattt tcatcgatga tggcttaatt agtgtcatag 180
 tgcaaagtgt agcaacaaat accttgattt gccaaattga aaatgggtggc cttctaggaa 240
 gccgtaaaagg tgtcaatcta ccaggagtgt aagtcgattt accagcactc tccgaaaaag 300
 acaagcaaga ccttcgtttt ggaattgagc acgacgttga tatgattttt gcttctttca 360
 ttcgagatgc caacgcttta gatgaaatca gagcagtatt aggagaaaga ggacgccgaa 420
 ttaaagttat ctctaaaata gaaaacaaac aaggagtagc taatgcagat gagatcatta 480
 gggcttcoga tggttcatgg tgccgaggtg ntggggaata gaaatccgca gagaaattgt 540
 cttgacaaa 549

<210> 303
 <211> 547.
 <212> DNA
 <213> Ctenocephalides felis

<400> 303
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 atccaaattt cagccttgtc acaatcagaa tgactgataa tagcgattta gatagacaaa 180
 ttgaacaatt aaaaagatgt gagattatta aagaagctga agtaaaggct ctttgtgcta 240
 aagccagaga aattttggta gaagaaagca atgttcaacg agttgattca cccgtcacag 300
 tttgtgggga tattcatgga cagttctatg atttgaagga gcttttcaaa gtgggtggtg 360

atgttccccga aacaaactat ttgtttatgg gtgattttgt ggatagagga ttttacagt 420
 tggaacatt tttattgttg ttagctttta aagttcgata tcctgatcga attcattaat 480
 aagaggaaat catgaatcaa gacaatacac aagtatatgg atttatgatg aatgcttaga 540
 aatatgg 547

<210> 304

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 304

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 ttggtatttc tttattggaa ttggcaactg gtagatttcc ttacaatata tggggaacac 120
 cttttgaaca actaaaacag gttgtgaaag atgatccctcc tcgtttacca gccggtgtat 180
 atagtgaaca atttgaaaac ttgatagaac aatgtttaca aaaacaattt gaacgtagac 240
 ccaattatca acagttattg cagcatgaat tttgtgtgac ccatcgagat aaaccaacag 300
 atgttgcac atttgtgaaa gatatactaa cgtttgatac agtacaataa atttgttctt 360
 actaatattt agtattaaac taataaatta taataatgta gttaacataa cttgttgctg 420
 ttagattttt tgaagttata atcctgaaac ttgcaagatt tgtttcaaatt gtaaaattat 480
 atataaaatc atatttaaca tcatttacat catatacatg atattttgtt aaataaacct 540
 caattctcg 549

<210> 305

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 305

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 tgtgtccgtg cccgaaaatt tcagggagat gagcggctta aaggacatcg ccaggcaact 120
 tgtgcaagaa gcaccaggca ataaattgaa cgtaattttg gcgggtggaa gcgacatgat 180
 gggcagcagc cgcaaccggg agtcggcgtg ccaacgcgga gatggacaag atttggtagc 240
 agaatggctt cattcgagga ctagcttgaa ctcccagggc gtctatgtta atacgactgg 300
 tggacttgaa aaggcgaaaag tgaatgagat cgattacttg atgggtatat ttgcagcaga 360
 tcatttgccc tacaatgcag tgagggataa gggcctaatt ggaactccgt ctttagcaag 420
 gatgacaaaa caagcattag gaatattaca aaggccagat aaaggattcg tttaatgggtg 480
 aaggaggcgt attgatcacg ccatcataaa attttnacaa ttagctcttg cgaactgctg 540
 aatttgcca 549

<210> 306

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 306

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gaaaaataga acattatcga cgtttaaatt tctccaaaat tgtaggtta tgcaaaaact 60
ttgtccacaa agactctgct actacaccag agattgatac cattttctca aatggacgca 120
atttaactat atcaactggc aaatacgetc gattttgcga tggatcagct gttgccaaaa 180
ttggtgatac ttcagttatg gttacggctg tgtcaaaacc aaagtctcat aatggtggga 240
atthttcttc acttgttgtt gattacaaac aaaaatcagc tgcggcagga cgcattccta 300
cgaatttctt aagaagagaa ctagggtcaa cagaaactga tatattaaca tccagggttaa 360
tagatagatg cctcaggcca ttatttccac ctaactatct caatgaaacc caattagttt 420
gtaattcgtt agccgtgatt caatatacaa tgctgatgtg ccagctatta atgctgttca 480
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ttcgactga                                     549

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<210> 307

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 307

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cgtgttttga acttgcaagg ccgacaactg tatgggggca atgcacacca tcaagccgcc 120
gtgacttctc ttgcttgggc tccatccgga gcttattttg ctctcggctc ttacaacgga 180
attcgctgtg ggcacagcgc tgggtggtcg catgctttga ataaagccga aactggttct 240
ctgtacagca ttgcatggtc acaagacgga actcgtattg cagcagcatg tgccaatgga 300
catgttttat tcggaaatat tatagaaaag gaattgtgca aatacagcta taacattgtt 360
ctaactacag ctagtacttt gtcagtgagc agtataattg atacaacaat aatgaagtg 420
cttgaattta cagatcgagt aacaaatttt gatataaact ctgagcatct gtggtcacta 480
caccaactca atgcntatat ataaaattga cgatttatto acccacagtg ttgagttgaa 540
ggatggtgta                                     550

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<210> 308

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 308

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tctttggctt actaatcaaa agtgatcgac ttctttcttg tagttttgta gtagtgttta 120
aatcatttgt taataatgga aattgtgggt gatttcgagt ataacagcaa ggatttaata 180
ggacatggag ccttcgctgt ggtctttaaa ggaaggcata gaaagaagac gcatcttggt 240
gtggcaatta aaagcataac aaaaaagtct ttggccaaat ctcaaaattt gttaggaaaag 300
gaaatcaaga ttctcaagga acttactgaa ttgcaccacg aaaacgtagt cgccctcctg 360
gactgcaaag aatctgctca caatgtatat ctcgtaatgg agtactgcaa tgggggtgat 420
ctagctgact atctcagtgc taaagccctt aagcgaagat caattagact tttcttgcca 480
ttagcggcgc atgcganttn atgccaaagc tcgactcgga ctgaaccgag attctctgcc 540
atccgcagc                                     549

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<210> 309
 <211> 308
 <212> DNA
 <213> Ctenocephalides felis

<400> 309
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 catactgggg cgggtatata gtaatacctc gatctattga gttctggcaa ggccaaagtg 120
 atcgcttaca tgatagaata aaattccgaa agttgcttcc aaatgaacaa atagatttga 180
 atttaacaca tgaagcagat aatggatggg tttaacgaaag attatcacct taaacttaaa 240
 attatttata tttttatgca ggaaagccaa aataaaaata gttcaataat ttgaacttat 300
 aattatgt 308

<210> 310
 <211> 437
 <212> DNA
 <213> Ctenocephalides felis

<400> 310
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 ggatttcggt taacgtaagt tgtaataactt cctccattga atgcaacatt aataggatgt 120
 gatgaattca tagaatcata gaaaatctta aattcgatcat tatgtgtgtg gccattgaat 180
 tgtcctgtta ttatatgcga aaatctttgg atgatgcgcc tatattctct gtcccaagta 240
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 ctttctgctt ctaacagagt atcatgtaac cattgcaatt gotttttggg gaatgcagga 360
 tcatacagta accacaaatt ataaatatag gccacattat tattcaacgc tatgactcgt 420
 agtccaagtt taggtgt 437

<210> 311
 <211> 173
 <212> DNA
 <213> Ctenocephalides felis

<400> 311
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 ccgaaatgca gtattgtccg gaaataggag cagatccggt taaggaatcc tgtagcccag 120
 atcaagtgtg cgctgatcaa agtggatatc tacagtgcac cactaaagaa agt 173

<210> 312
 <211> 337
 <212> DNA
 <213> Ctenocephalides felis

<400> 312
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tccaccagtg ggatcgagaa ataatcgac aattagctgt gttcgtgccc tggaccaata 120
 tgtaaattggc caaggaggct atgccaactct tgtcaatggg ggagttggct ggaaaaatgt 180
 aactttactc ctatcttctc agactggcaa aggatttaac ttcttagttg aaatttgagg 240
 atattagatt agaaatataa tgaaaatgtg aatatagaaa aaaaattaaa tatacaatag 300
 tatttttagaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 337

<210> 313

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 313

attgaagacc gtacacaggc ctgttcaatc tggaagctaa gggttctaag ggtgctacaa 60
 ctcccttcaat cgcatagaact aagaacaaag gtttcttctc actcttgcca tcctttgatg 120
 tcaacctcaa caatactttt totggcatga gttcgttact ggcaaagctg acttggtttgt 180
 cttegtctggg gactgcacca ttggctgttg cagaagtatc gccaccacct gcacctaat 240
 ctttcagttt accaaagggtg agtgatctga tttcttgagg attcagtact aagtcgtaat 300
 ttctttctaa agtttgttta atttcagctc ccatcagcga gtccatacca agatcagaga 360
 gggtagcaga ggcctgtgta tttttgggtg ccttaagacc taatatattt gcaactgcat 420
 caactaaact aacacctcct gcaccagcac cagcgtctgc tttcctctta tcagctaata 480
 ccatggaggc caagacan 498

<210> 314

<211> 457

<212> DNA

<213> Ctenocephalides felis

<400> 314

tgnggttggc attatcanca accccaaaaga caagcangtt gaaatgtctg tttcaaaaat 60
 aaactgcaca nngattttta gctgacccta taacacctgt aanaagattt acaanancct 120
 cnaaactoca tgcgaacaaa aatggaatta cttgtgctac gaatacangg ggaatttggt 180
 atntgcattg gaaaatgagg aaaattttga ttccaaattt cngattgata catggaatag 240
 gcaanatggg aaatgggggtg gaattacttg tgttttacag gatggagatg tgtttgaaaa 300
 agcgggagtg aatatcacag taatgactgg tgaactanaa cccagggcca ttcaacaaat 360
 gaaaagtcgt ggaaaacant tcatccantg aagggtggacc actanaattc nttgcggcan 420
 gtgttagtgc antaantcat cccaaaaatc ctcatgt 457

<210> 315

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 315

tggcgaaact atgggtcact ctgctgatag attggtgct gctttcaaag catctcgaga 60
 agaacaagat gcatatgctt tgaaatctca tacatatgct aaaaatgcac aggagaaagg 120

atatttcaca gacattgttc catttcaagt tccagggtgtg tcaaagatgg tagaaactga 180
 caatgggtatt cgtgtcacat cattagaaaag tctggccaaa ttgaaacctg cctttgtgaa 240
 accccatggc acaattacag ctgctaattgc atcattcttg actgatgggtg cttcagcttg 300
 cctcattatg actgaagcca aagccaagga attagggttg acacaaaaag cttatctaag 360
 agaatttttg tatgttgccc aagaccaggt cgaccagttg ctgcttgggt cctgcttatg 420
 ttacacaaaa gatcttagaa cgtatgggtct gagttaaaaag acatagatgt ctgggaaatg 480
 catgaagcctt ttgctgggt 498

<210> 316

<211> 465

<212> DNA

<213> *Ctenocephalides felis*

<400> 316

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 ccctagattg ctgcttgaaa caacaactgt atgcacatga cggctatgaa accattctgt 120
 gcatttccat gcacgtcaa tgttatgaat ttgcaacca gtgagcaact ccacctcaaa 180
 ttgatttgga gtaacaatat cagccaatgg aataattagt tctctataaa ttggtataa 240
 tgattctgga acatacattt ttccattatc acctaact ggatcgcaa cgtatgtcaa 300
 ttttgattt ttttctctca attccttaac gacgttcgca attgttttaa gaaaatctgg 360
 attagctaca taaccctgta ataagtgact gtagacattg ataccattca atgctaacc 420
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<210> 317

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 317

tttttttttt tttttttttt tttttttttt tcttgaatnc ataataaaat ttattattag 60
 ntnattataa aaaaaaact taaaaaatat attatatgct taaatngttt catgtagnca 120
 tatatttatt acatgancit tttaactaaa tctataangg gttgaatcaa ttcctccgtt 180
 gnagttncat tgttattaac aagancaaaa tcccagtttt cataattatn taaatcacat 240
 tcanangcaa catcatcaac accttongta aatttccaac ctoganattn tcgaatgcat 300
 ttactgcaat taattctaact ngttataact ttagcacat atttttcaat aaaccatttt 360
 atatctgngt tcctgcggat atcactaact atgcaaata gttttgaaat tgcttgga 420
 gccctttaca aaaataacca taatcttcat ttcaaactcg gtcgctccat tctatcatac 480
 tttctgagct ttctttanat 500

<210> 318

<211> 585

<212> DNA

<213> *Ctenocephalides felis*

<400> 318

nctgacaatt tatcttaata gaatagcaca agcaacattc gacaactttt caatggctgg 60
 ggtctatttc gtgcatcgaa gtctgttaaag gaaaattcgc ctactgccaa acatgaagaa 120
 ctcatggcaa aagcatgggtg ttttgaggct tcagaacgcc tagaggcaaa tttaaaacat 180
 gtagtaagcg gtaagcattt agatttatat accaaattag ctacaatagg caaaaattca 240
 tgcgctgcc aatggagttcc gcaaaataat ccattaaatt tgtaataaat attaatgatg 300
 tgtaactaag cttaagttca ttttaatttat tttattgata aatactttaa tttaacagaa 360
 tgtaaatatt tcattttatg taaataatta ggggggnattt gttatcaaga tgcgtgcgcca 420
 aataagcctt gtcatacaga ttattttcaa ttttgataat aagtaataca atgcgcattg 480
 gtacattttg naatctgaaa tattgncaat ggctgatat atttaaatat aaaatgaaaa 540
 aaattaaaaa ttaannnnnn nnnnnnnnnn nnnnnnnngg ctgg 585

<210> 319

<211> 363

<212> DNA

<213> Ctenocephalides felis

<400> 319

cctcctagtt cacctgtttt ataatcatnt ggaaaaacat gatgataatt gtgccaacct 60
 tcaccaaggg ctgcaattgc aacccttaag ttttccactg gacttatatt tttgtcataa 120
 gggtttctggc cccacatatg tgcaacactg ttcacaaaaa atgcaatatt taggggtcaaa 180
 cagaacctaa aattaaaatt gacccaaaaa gaaacctata ggtcttcttg ccaaaaatac 240
 caaggcgcca aaaccggtaa acctatggcc aatagggcaa atagagggat gtaaaacctt 300
 ttttgccaca tgactactgc atcggttcc aagtcactca tatcaacctg tttcctttta 360
 agt 363

<210> 320

<211> 223

<212> DNA

<213> Ctenocephalides felis

<400> 320

ttcatcagaa gtgtttccac agtctggcca anttaageta tacccttggc agctagtgtg 60
 gacgattctc cttaaattagg atggactaaa tgagccatgt tcggtgctcc accaatgcct 120
 atgctacgga atgcacgttt tgaaacttca tcgaaaatca taccctaaatt tgctgcaggg 180
 tttttaaatg ctttttgtaa ttctttcaaa tgtgcaccag cgt 223

<210> 321

<211> 337

<212> DNA

<213> Ctenocephalides felis

<400> 321

ttttataagc agaaccacca ggtgaaagat aaacgttcca ggatcctgca ttattgaaaa 60
 ctttcagaaa attaccagat aatttatatt gtatacaaaa cgtgtctgta tatgcagcag 120
 cctggatgga agatggtaac ttttgattta gtttggtaac ttttttcttt tcatctggtt 180

gaaaattgga tcgttcatac acttttttga cgcgttgac aaaagtga aaatcatcgt 240
aattattggt ttgcaataaa tcattcacta caaataaccc atgaatgctc agtggttaagt 300
tactgttgta actaacaaaa tctatgagag aaagtgt 337

<210> 322

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 322

gaaccaacaa attccatcta caaccaaatt taatattaaa atttgaaatc attttttaaaa 60
aatgatcgtc agaagtgttt tgggcctttg tgtcctggtt gggctcctgg tgtctgcaaa 120
agcagattta acagatgacg tcatggctag gatgcctgat gacttcagga gggagtattt 180
gtaccagaaa aagttgacag tgggtgatct gattgagcaa aatgggtacc cctgtgaaac 240
ccaccaggtg acaacagaag atggctacat cctgaccgtc tacagaattc ctcacaacag 300
aaacaacgac accattacca ggggagcagt cttcgtaatg cacggactcc tgtccagtgc 360
tgctgactgg gtcgtcctcg ggccacatca aggactacca tatttgcttt cgcaccaagg 420
ctacgatgtt tggctaggaa atgcaagagg caacacactg tcaggaatca cacacattga 480
gtgtgaagag tgggtgaatct ggaattagtg gaacgagatt gttatacgat ttgctgcatg 540
atcgatacg 549

<210> 323

<211> 369

<212> DNA

<213> Ctenocephalides felis

<400> 323

ggatgtgatg tgtctaaagg ggaaactttg tctgaatata ttggtagtgg accaccacag 60
ggcacaggat tacatagata cgtttttctg ctctacaagc aaccggataa aataaaattt 120
gatgaattga gactgactaa cagaagtggc gataatcgtg ggcagttcag tattgcaaaa 180
tttgccatga aatataattt aggtcaacct attgctggaa atttatacca agctcaatgg 240
gatgattatg ttccagaact ctataaacag ttgggagctt agctggctaa aatatagttc 300
aataataata tgaacaatgt ttgaatttta ataaaactat tatttgttga taaaaaaaaa 360
aaaaaaaaa 369

<210> 324

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 324

gcattattatt tattttttata tatgtatata cagctagata agttaaacat gcactcattg 60
agtttcatca tcttttagta gtggcatttc gtcttcttcc ccttcttgac gaattttgat 120
gtgggcattt ttgtcagttt gtgattgcgg tgcttgtgta gaaccaacac tttttggtgg 180
atatggtatt ctgaacaatt gaattcggag atgatcacat atttctaagc agacttgtgc 240

acagtatctc atcagatcga agatggacaa agccaaacaa aggcagagaa cataatattc 300
 atttacaaag ttgttgaaat actgatttag gaataataaa gatggtccta atagagccca 360
 gtctaaatat tccatttcac tttttgtcat atgcgcgacc actaatctgt ttgtgacctt 420
 tgcagctcca ttccaaaggc gagaatatac aaagcgggat gattctcaaa tatattgctg 480
 gactcttctg gcaaataatg aatgcaggaa tacaacccaa ctgaatggat tattggtaca 540
 aacctgtcc 549

<210> 325

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 325

gacaaatccg agaacttcga tgattacatg aaagccttag gtgtcagtct agtcacccgt 60
 aaattgggca accaagttag cccagtggta gagctgacta agaatggaga tacctatacc 120
 ttgtcatcca ctagcacctt caaaaattcc atcatcacat tcaaacttgg tgaagaattt 180
 gatgaagaga ctctgatgg cggaaaggta aaatcggtag tcaccttggg tggtgataaa 240
 ctgactcatg aacaaaaggg agataagccc accaaaatag tccgtgagtt tggaccaact 300
 gaaatgaaag cagttatgac tgttgatgat gtggctctgca cgagaactta caaagcattg 360
 taatttcaac actacggttt tctatTTTTG ccttaagtta tatgcatact cgtatggaat 420
 ctgttataat acagactaat tgactaatta tggcattgta ggatgctgct tgttcatctg 480
 ntaaagtact gtttaacttt tttgttttat cgaangatga aattaanctt aaaaaaaaaa 540
 aaaaaaact 549

<210> 326

<211> 298

<212> DNA

<213> Ctenocephalides felis

<400> 326

aagctaccac catcgcaaaa tgcgataatg gagctccttt gccaaaccagt gttgacgtcg 60
 aaggatgtga caaattacct tgtccattag ttcgtggtag cacttctttg actgatgtta 120
 aatttactgt ccctgccgat tctgctactc tgaaccaga ggtaaaagcc aaagttgccg 180
 gtgtcaccgt tccttaccba ttacccccag agctaagtga tgcttgccaa tttottaagg 240
 aaggatcatg ccctttgaaa aaagacgata aagtcacata caatctaaaa gttccagt 298

<210> 327

<211> 598

<212> DNA

<213> Ctenocephalides felis

<400> 327

gaaatcaata agacattatg aaactaataa acagtatgaa agtaataaac aatatgaagc 60
 tagtaaacaa tacgaaggcc ataaacaatt tgaacctagt cgaccttttg aagctaataa 120
 acaattcgaa gctagtaaac aatttgaagc taacaaacaa ttcgaagcta ataaacaatt 180

cgaagctaataa aaacaattcg aagctaataa acaattcgaa gctaataaac aattcgaagc 240
 taataaaciaa tttgaagcta gtaaacaata tgaagctaata aagcaatatg gagctaaciaa 300
 acaatatgaa gctaataaac aatatgaaag taataaacca tatgaaacca ataaacaata 360
 ccattcaatg agcgaacgct atcatgaatt tagcaaatca ggaggatatg gaggctcgaa 420
 tttcgatcaa aatcaggcan atgcaanaaa ctttganaga aacggaaaat ttgaaagcag 480
 cggaagctat caatatcaca ntgaacaaat ggcgagaaat ctactgattc aaataagcct 540
 tactcctaaa catatcgatg agctaataga aacgttatct gatagttcaa tgtactcg 598

<210> 328

<211> 221

<212> DNA

<213> Ctenocephalides felis

<400> 328

gaacaatata gataccaaaa tcattttgaa cgagatggaa cttgcgcaag agctcacatg 60
 gaatcttttag ttgatggtaa aataaaattc agacatgtca tggaagaaaa tggaaaaaaa 120
 gttgaattta gtggacaact cagacgtaat gatgaacatt ccggtaatgg atatctgaga 180
 atcagttatg aagatacaaa tcgagaatca gattatatag t 221

<210> 329

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 329

ttgatagaca gatcagtcgc atcaattgaa tcttgagcta ttttgcctaa ttgactatct 60
 tgctcaattg gaactgactg aatagacgga attccttcaa tactttgact tccaattcca 120
 tctccaagaa ttttctctaa tttttgggtg aataaggaaac ttctaattga cgctgagtc 180
 gaatttttat ctctgagctt tacagaacta gatcctgtat tagttttatc agtttcgggt 240
 ttataacaat catcacattg agaattcacc agtcctgcag gatcaactat ttgaatattg 300
 tcattacagt gagctttatc atcgttgtct ttgaattcct catttttgat atcgatttca 360
 tttttagttt cgggaaaatc tttcagcgct ccgtcacgta gtaagctaga ttcagtggaa 420
 gatattgaac tacttctaata tgatttaatt gatgagttat tgctttttga agagcttttt 480
 cgaagttca 489

<210> 330

<211> 352

<212> DNA

<213> Ctenocephalides felis

<400> 330

cagtttgtcc aattactcgg aatggccaat gcttogaatc ttgctgcact gcaggtttott 60
 ccatttttct accaattaat cgttttagcat caaatacagt attttttgga ttcatacgcg 120
 cctggccctt agctgcgtct ccaaccaaac gttctgattc agtaaaagca acatagcttg 180
 gcgtggtgag atttccctga tcatttgcaa taatctccac ttttccctgc tgccatactc 240

cgacacagga gtatgtagtt cccaaatcta ttccaatagc tggcattttt ttctatgtta 300
gactgtttga ttgttaatca aaattaaatc caattgaact cgaactttgc gt 352

<210> 331

<211> 265

<212> DNA

<213> *Ctenocephalides felis*

<400> 331

tttttttttt tttttttttt tttttttttt ttctgcatca gataatacct cataagcngg 60
tcttagatct tgaaacttcg aggctgcac tggatcggtt ttattcttat caggatgcaa 120
ttcctttgct tgtttcctat aagctttctt aatttcattt aacgtcgac tacgagatac 180
ttttaaatatt gaatagaaat ctggtccagc gctggctagt aaaaaataaa tacttaagtt 240
aactaacact aaataacaca gtttg 265

<210> 332

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 332

acatagtgat cttcatcata ataaccgatg tcaccagttt tgaaccaacc agtttctgga 60
tccaaaactt cagaagttgc ttcaggacga ccataatacc ctaacattgt agggccacgt 120
agatacatct caccttgccg atttgccct aaagtttctc ctgtagaagt atccacaatc 180
ttaagttcag tgttcattaa aacgtgtcca acagttcctg gtctatatc tgcgcaagtt 240
atagttgtag ttccacccat acattcggtc aaaccataag aaaccaccaa ttaccattt 300
gtcaaagtgt tttgcatagt ctgacctgt tgtggtgaca atttgaacc aacagcaaac 360
agcaacatta catctccaaa tggttctgca agttcttctt tatcttgtaa atacaaattc 420
atcagagaca attggtgaaga tgatagtagc atcaggcctg cttgtattcg cgcataattc 480
tcaataagtt tcttcgtt 498

<210> 333

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 333

tccgaagcct tngccgttan tntttactca tcaactocaga gaaggcaata aaattggcag 60
caaacgactn tttcagacac catttgaagg acaaaaatgg taattttacca ataacaaatc 120
aaatgggtggc tggaggggtt agctggatta tgtcaaatag taataactac gccaatggaa 180
ttgttgaaaa tacaaatgag ggatgcagga cggatagctg ctcaaaaataa aaaagctgga 240
atagccactc ctaagatacc agctactgaa ttaacttttg gacttattag agacaaaggt 300
attttgggtc tatataaagg aactgggtgc actatgctgc gagatgtttc attttctgnt 360
gtttactttc ctttggttcg tactcttaat gcaactgggtc caagaaaaag tgcggattct 420
aatgaancaa gtttttgng ctctnttat ctgctgcgt gttggatcaa tggcggcatt 480

agttgtcaat ccatttgacg

500

<210> 334

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 334

ctcctgcaag ctttcaaatt tcacactgat ctattaatac agncttgaat cacatacaga 60
ctcctcatat gtataatcac atataatgnt tcataagcct taattgaaat ggaattttaa 120
ttgaaatggg gatccatgat ggaagtgatg gaacggtgaa ccaccgcccc ctctgtgatt 180
atttgcagat tctggatcta aaggatcttc accgttgtca aactgagctc ttttctcagg 240
atcagtaaga acctcttttag cagcagcaat atctataaat ttattctctg ctattttctt 300
ttcatcatct ttgaaattat caggatgcc a tttttgtgct gcttttcgat aagctttaat 360
gatctcttgc tttgtagctg ntctttttac acctagaaat ttataataan ctcttctctc 420
acttgnnttg taacctgag ctttcaaaag cccatctttc gctctctgac atgctcattt 480
atttccaaag ctgatttata 500

<210> 335

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 335

naagacgttt tgaaacctnc ntttaaacca tttgggttgg gggctggggg aanttttaag 60
gaaacccttn caaaaatggg cacctcaact ggtgcaaac gtttttggct tttnttgggn 120
ccgtggtctt tagacaaacg tgccagaggg cttttcacga aaaccaaggg gagggcattg 180
tcattcotga gaagggcgca agcaaaaagt tctcaagggc agagttattg cagttggccc 240
ggcaaagaaa ccaactggtg aacatgtgcc cctaggaatc aaaagtgggtg acatggtttg 300
ctgccgaatc cgaggcccaa aagttgagct cgaagagaac aagaattcct tattcaaaga 360
atccgatatn cttgccaaagt tggatatcga cgaataaatt gccnaaaatt taccatcttt 420
cacaatttnc ccaacacaaa ctgnattcga agctgttgct tnttatnaaa gtagcaatgg 480
tttttnnttg ngggtctctt 500

<210> 336

<211> 482

<212> DNA

<213> Ctenocephalides felis

<400> 336

ttatataata caatttatta taaaattaac gntctaantg tatcccggtg aattaattat 60
tttaataacg attttttact tttttataat atatatgtat tatattccct attatataat 120
acaatttatt ataaaattaa ctatctaata tatcccggtg aattaattat tttaataacg 180
atttttttta ctttttataa tatatatgta ttatattccc tattatataa tacaatttat 240
tataaaatta actatctaata atatcccggtg taattaatta ttttaataac gattttttac 300

ttttttataa tatatatgta ttatatgtgca aaaatgtaaa aaagtaaaat ttagttgcgt 360
 gaattcgtgc agttcacccg aaatgcanta ttgccggaaa taggagcaga tcccggtaaa 420
 gaatnctgta gcccagacaa gtggcgctgt caaagtggat atctcagtgc ccactaagaa 480
 ag 482

<210> 337
 <211> 418
 <212> DNA
 <213> Ctenocephalides felis

<400> 337
 ttgacaagca aaataaaata catcaacgtt gttttttacg gccacttgca agttatttaa 60
 tggttccatt ttttgaacaa ctccatttgt tccaagaacc aatgatgttt catatgtttg 120
 tgatggttgt aaattcggaa cttgtaatgg tgcaccaggt gccagaccaa agctgttttt 180
 attcaactgt atggcaaaac cactcatagc ttgcattgct ttgttggtgt agctcatgtc 240
 catgtaaatc tgtccacttc tcctggagaa tgttccatat atttccaaac ctttgccctt 300
 ttcagctggc aaccacaatg cttttggtat aacaaaaggg ccagctgatc ccacagagaa 360
 tattttctccc agaagtccag agttaccgat gttattaagt anaattgaca tctgatgt 418

<210> 338
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 338
 gtontattcc attattccat gcacacaata ttcaggcgaa tgagcctgct ttaagcactc 60
 taatttgttc aaagtaaagc taccggccca cctcgacact cggatgaagag caccgtggta 120
 ggattttgag ttgggcccgc ttttgacagg ctaagcccac cggtaggacg tcccacagac 180
 atgccagttg aacaccgcga gcggtgaacc gacagtgtgg gacacagatt caactacgag 240
 ctttttaacc gcaacaactt taatatacgc tattagagct ggaattaccg cggctgctgg 300
 caccagactg gccctctaag agatcctcgt taaaggattt aaagtgtact cattccgatt 360
 acggggcctc ggatgagtc cgtatcgta tttttcgtca ctacctccc gtgccgggag 420
 tgggtaattt gcgcgcctgc tgcttccttg gatgtggtag ccgttctcag gctccctctc 480
 cggaatcgaa ccctgattcc ccgtcccgt acaaccatgg agtcgcagaa ctacctcgac 540
 agtgataag 549

<210> 339
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 339
 aatctctgaa actaattacg agtgcagtag caattctttt ttactaaaa gaaaaataac 60
 tttggaacaa aatggcaagc acaagacccc acaggggagaa catgacagac gaacagattg 120
 cagaattccg tgaagctttt gctttgtacg acaaaagacgg agatgggtgcg atatcagccg 180

ccgaattagg aactgtcatg agggccttgg gtcaaactcc ttccgaagcc gaacttaaag 240
gatacgtcaa ggataatagc gtggccatga ccgtagattt tccaacattt ttgacaatga 300
tggctcgtca gatgcaggaa ggcagcagtg ttgatgaaat ccgggaagcc ttccgggttt 360
ttgataaaga tggtaatggc cgaatgtctg ttgcggaatt gagacacatt ttaacatctc 420
ttggagaacg cttaacagat aatgaggtgg cgcaatgatc cgagaagcag acgtagataa 480
tgatgggatg tagattatga gcaatttatt caagcatgcg atgagttcat aatataaaaa 540
taataataa 549

<210> 340

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 340

gacnntataa caaaccgaga ttatttttga aatnaaaggt attaggaaaa attattgata 60
ataacataaa agtctaaatg cttttataat atgacagcaa tgcgtactgc aatgaatgtt 120
gtgtatacag ttttgtggat totattaatt tcacaaggta cccaaagcgt tgaattaact 180
tttgaactac cggataatgc aaaagaatgc ttttaccag atattcaaaa aaatacaagc 240
gtcaccttag agtttcaggt cgtcacgggc ggtcagtatg atgttgatgt aacattagaa 300
agcccaaata agcaaattat atatagtcaa gtgaaaaccc aatttgattc gcatcatttc 360
actgcaccga taagtgggtg ttaogttgct tgtttcagta atgaattttc cacgttctca 420
cacaaattgg ttatatggac tttcaagttg gtgatgaaca gctttaccog gtgtcgggga 480
gcatgctaca gtcttaccga acttgaatct ttgccaagag attcatcgaa gtttgccagt 540
ttctcaatt 549

<210> 341

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 341

ataccaaata aagtttggtt gtgagaaaa gtatttgcatt aatttggtt atttccacta 60
tatcagatta ctcatgtgaa ccatgtctct cgtaccattg ttgtttcacg actggtggga 120
ggattacgac cacccaatgc gtcttatgga ccaacatttt ggaatgggoc taaatcgtaa 180
tgatcttatt actaatctaa gggccactcc atcactcttc cgtggcgggt attacagacc 240
ttggaggaat gaaattactg ctgacgattc ttcattcaact atcgttgctg acaaagataa 300
attccaagtg acttttagacg ttcaacaatt caaaccaaaa gaaatcacog taaaaacaaa 360
ggacaattgc gtaatcgctg aaggcaaaaa cgaagaaaaa caagatgaac acggatacat 420
ttcccgctcat tttgttcgac gatatgtctt gccagaaatc acgatgctgc cgatgtagta 480
tcgagtttgc ctcggtatga gtattgccat acagcgccaa gaaggccttc agtgagcaga 540
cgagtggcc 549

<210> 342

<211> 383

<212> DNA

<213> Ctenocephalides felis

<400> 342

agcnttaaat aacaatttca aattcaatat gaggaattta gtggttttcg ggtagtggtt 60
ggtagttttta tttgttggtta caatggcaga agacacacca gatgaaaatg agaaattcga 120
agtgggaatg tcagagggtt ctttgaatga tgtagagcca gcaccacgtg tagtatgcc 180
acttgaggga aacagattat gcaatgctcg gtgcatatct ctaggaaaaa gaggaggctc 240
gtgcaaaaaa ggaacttggt actgcagaaa ttgaagaaat ttaatatagc ataatatatt 300
agataaactt tgaataaaac cgtgttaaaa attttgcgca aaatatataa tataacctaca 360
aattaaaaaa aaaaaaaaaa aaa 383

<210> 343

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 343

aacagctggt tgtgccgtac ggtgggtcccc gcgtgtgtag cattgtagca gtatcaaagc 60
gaagctcgat cgatccggtc gagacgtgaa gcccgcgca taccgccgct tcagagacaa 120
tttacagact cgggagttta tatcacgaaa ccactttgtg ttcgacttct cagtacgaca 180
gtgtcggtca tttcaaagc gcgttggtg tgccatcta tcatttacaa cggggttcct 240
gatttttoga aggttcagta ataattttcg tatttcgtta tggcgatgag atgtgtagga 300
ttgctcgta agagcaccat ggtccagtc ggacagcgca ggctgatata ccaatcagct 360
gttgctatga acaggatgct tcaggattca ccaaagcgtc acctagata atcaatcttg 420
caaaggtaca ctgctcttct caagacgac ggtaacgcag gtcacttacg tgtggatcga 480
tggacggtga gtacttgccg ctaaggacgt gtcttgaatt aacctcaaa ccagaaactg 540
caaatggac 549

<210> 344

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 344

tatcaactta aataccagca tcaaaatggt gtcagctggc atgacgtgag tgaagtattt 60
attgttctgc ttcaatttaa tatttgcctt ttcaggacta accattctta ttgttgagc 120
cctaattcaa tcatcttttc accactattc tgaatttgta aatgctagt tctggtcagc 180
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atttatattg gaattatctg ctggaatagc tggctatata aagcatggtg aacttgctga 360
aaccttggaa aataatttta ataccagtat gaattcctat attgatgata agcaaacagc 420
tgcaacatgg gacgttatcc aggaagatct cgattgctgt ggtatgaatg gccaaagtgc 480
tggaaaaaag tttttaataa tgaccaattc caaaatcctg tgtgatgagc tccaaagtga 540
tttgaatgc 549

<210> 345
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 <213> Ctenocephalides felis

<400> 345
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 aatatttttac aagccgtccg agttcattgt gttcattcga gctgtgttag cattgcactt 180
 caattcctca agtttcatac ataattcaaa atggctcgta ctaagcaaac tgctcgttaag 240
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 ccatccactg gaggcgtcaa gaaaccccat cgttatcgtc cagggtactgt cgcccttcgt 360
 gaaatccgtc gttatcagaa atctactgaa ttgtgatccg taaattacct ttccaacggt 420
 ggtgagagaa attnccagga tttcaagaca gatttgcgtt ttcaatcact gctattgcgc 480
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 ctagaggtg 549

<210> 346
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 ggtttcaacc catctgctga agaggctgat gaaggaactg aaacagccac ggaatctggt 180
 gttgatgtgg tcttaaatca ccgcctttgt gaaacttttg ccttctcaga taaaaaatca 240
 tacactcttt atttaaaaga ttatatgaaa aaattgggtg cgaaattaga ggagaaatca 300
 ccagaacaag ttgaggtatt caaaacaaac atgaacaaag tcatgaaaga aatattaagc 360
 cgtttttaag aaatgcaaat gttcactggt gaatcaatgg attgtgatgg catggttgct 420
 cttatggaat atcgtgaaat agatggtgaa tctgtccaat tctgatgttc tttaaacatg 480
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 ctgattttgn 550

<210> 347
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 catctcaaaa gatgatcagg atttatatga gctatctatc atacatctga atgattttca 180
 cgccagattt gaagagataa cacctcaatc aacagcttgt aataataaag aagaatgtat 240
 cggtggaata gcgctgtctt ataccgaagt aaagcgtctg caaaatgaaa ggacaaatcc 300
 aattttcttg aacgcaggcg acaattttca gggcactctt tgggtacaaca tacatcgatg 360

gaatgtcacg cagtactttt taaataaatt taagactgat gctgtgacat tgggtaatca 420
tgaatttgac cataagattg aaggtgtggg tccattcatg gggtccatcg aagcacctat 480
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gtttagacgc 550

<210> 348

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 348

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tgaaagttac aacccacctc cagaatatct atttgacaag aaagaattga agcaatggaa 180
taaacaaaag gacacaccat ggaagcgtaa actacatttt gtacctgaaa aatataattc 240
actacgcgaa gtaccatcat attcaagata cattaaggaa cgtttcttac gttgtcttga 300
cctttactta tgtoccagag ctataaaaat gagattgact attgaaccgg aagctttggg 360
accacaacta ccaagtctta aagatttgca gccattccct actgtcaaag tctcgtctat 420
aagggacata aagacatgat aaggtgcatg acaatagatt gcttggacaa tatctggcta 480
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<210> 349

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 349

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gctcgcgttg tcaaagatcg accagtagat gaaattttgc gcggttaagg aatggcttct 180
atcttttatg aagtgtgtac tctaccagc tgcagctttg ctgctgcaat gcagaggctc 240
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ggagttggcg aacatccaac tcagcgtgct tgatatattt actattcgtg aagaaatggg 480
ccgttatggg tgactatact atggncggac ttgaaaatgc gtctgacctc attgntcgtt 540
ggtgcgtat 549

<210> 350

<211> 536

<212> DNA

<213> Ctenocephalides felis

<400> 350

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cctggacatt gtagagcttt tgaacaaaat tgctgactat ttaggtctcc agacottgga 180
accaagatcc atcaattaca acgatgaaat tccaatttcc acaggtgggc tcaaggaatt 240
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aatggacaat agcgatgact tccagaatct aatgaccgcg attcaatcta ctgattttca 360
aaaaattatc gattttgtag aaaactctcc agaaattttg gctctaattg ataaattgga 420
aaatttaggc tttgatgttg acacaataat cgatttcacg aaaagcttct tcggtggcctt 480
aataaaccgg atgtgatgaa ataatatag aatattcgta aaaaaaaaaa aaaaaa 536

<210> 351

<211> 284

<212> DNA

<213> Ctenocephalides felis

<400> 351

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gaagaaagggt gaccaagtta cttacaatct taaagttcca gtactgcaat cttacccttc 120
aataaacttg gacttgatgg tgcacttgt ggatgacagt aatgagtcag tagtatgttt 180
caagatcccc tgcaagggtg tataagtagc caaaataatt tttgatttgg tattgatgga 240
acaaaattaa aataataaaa ttgaaaaaaaa aaaaaaaaaa aaaa 284

<210> 352

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 352

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gttccttcga tatggaggat ggatctgttt tcttgtttac ttcggaatct gttggcgaag 120
gacatccaga taaaatgtgt gatcagatca gtgatgctgt attagatgct cacttgaagc 180
aagatccaaa tgctaaagtt gottgtgaaa ctgttactaa aactggaatg gttctcctct 240
gtggagaaat aacttccaat gctgtagttg attatcaaaa agtggttcgt gacacgggtga 300
aacacattgg ttatgatgat tcatctaaag gggttgactg gcgtaccctt aatcttctgg 360
ttgcattgga acagcagagt ccagacattg cgggtgggtg acacatgaat aggcaagaac 420
atgacatagg tgctggggat caggtttcga ctataggacc tgcaatgtct acttgcatg 480
atctcagcac ctatatagca gctggagtca tgacatcgaa ggatgaaaaa tgggcangaa 540
acagggtta 549

<210> 353

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 353

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 aatcgtgtct gcagtcctca gctctgttat atcttgtgga aatgcagcgt tggactgtct 120
 tatcaccgag gtgtttccaa caaatttgag ggctactggg gtggcaatat ctatggtagc 180
 tgctcgactt ggaggcataa ttggcaatgt ggtaattgca actttattag acatgtattg 240
 tccagccccc acatttattg tagcactact attggctgga ggtggctctga tgtgtctatt 300
 tttgcctaac acgaccaggg aaccactttc ataagaaaat ctcatcgtat aacagtcggg 360
 cgatataata aatatattta ttcttctgct ccatcccaaa aacttgattt tgaatttaaa 420
 tacttataaa ataatgagtc ttttcttata aaaatgtata taaataatta tcctanagtc 480
 gttcattaat tanttcatta atgatgactt cgttattaat taataactan taccnancat 540
 cnanaaaaaa 550

<210> 354

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 354

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 caacagtgtc atggaaaagt attaatgaga cttatgacga atcatccgat cgaatcaaatt 120
 tgtaggatca tgacaatata ccaaattctg ctttggaatt tgatttggtt gaaaaaagcg 180
 atcgaggaga atatacatgt attgctacta atcaaggcat tgggaattact gtttaattcta 240
 caaccttggt tcgagttcaa gataaattag ctgctttgtg gccatttttg ggtatctgtg 300
 ctgaagtaaat aattttatgc gcgattattc tcatattatga aaagaaacgc aacaaagctg 360
 aaatggagga gagtataca gatcaaagtn cagatcgaaa aaatactcct gtcacatgaa 420
 ggactgtgt gaggcataag aagtaancaa aanttaatcn gttgaataaaa agttatgcc 480
 ngagtgaagt atcaaagn 498

<210> 355

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 355

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 gccagaggcc tctgtctttt aaaggagtgg attcgtgagg cgattctgga ttttctgttg 180
 gagtcatcat tttaaaaatc aagtaaaaat cacagatgta tgcttacagg ttaatttaatt 240
 ttatggagca gaggttctcc accaaaaatc gaagataact taaatattgt aaacaagacc 300
 acacttcaag tctggttaaa atttaaccaa tgtatgatgt cctgaatgta gatttctgct 360
 agtccaaata atgtttcaat aaattgtaatt tcagcacaaa ctattctaag ttcactaggc 420
 ttctccaaca atctaaatcc aactcattat cttcttctta atatgcacca agatcagctc 480
 tttggtcatt tttagcta 498

<210> 356

<211> 269

<212> DNA

<213> Ctenocephalides felis

<400> 356

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tccaaagcat ttgtctgggt tagcaaaaca tcgtgccac tccatgggct ttcgtagact 120
tcagatactg cttccattaa agacttggaa gcactttgca cagctctaata acatcttatg 180
tagttattaa attccttttg cagtctatta gcactatatt gctgcctggg gaagttttgt 240
aatgctcat caaaaatatc atctgcggg 269
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<210> 357

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 357

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aacagtggtca tggaaagtta ttaatgagac ttatgacgaa tcatccgac gaatcaaatt 120
gttagatcat gacaatatac caaattctgc tttggaaatt gatttggctg aaaaaagcga 180
tcgaggagaa tatacatgta ttgctactaa tcaaggcatt ggaattactg ttaattctac 240
aaccttggtt cgagttcaag ataaattagc tgctttgtgg ccatttttgg gtatctgtgc 300
tgaagtaata attttatgct cgattattct catttatgaa aagaaacgca acaaagctga 360
aatggaggag agtgatacag atcaaagtcc agatcgaaaa aatactcctg atcacatgaa 420
ggacactgat gtgaggcata ggaagtaaac caaaaattta atctagttga ataaaagtta 480
atgcaccaga gtaggaag 498
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<210> 358

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 358

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atttttctgta tctggaggaa gtgcaacaat atatgcatat ttaggagaat ttcataatcc 120
taggcacgc agcagggcta ttatgggagc gtcaagcatc ttcggatttg cgtgtcttgc 180
attaccgacg gttgcatggt taattataaa tcagaaatgg tcattctata ttgacttttt 240
gggatataca tacaagccct ggaggttgta tatggttgca tgtggtttgc catcaactgct 300
ttgttgtttt gctttgtgga aattaccaga aagtcccaaa tttttgatga atcagggaag 360
aaacgaagaa gctcgtcaaa ttattgccaa aatgtataga attaatactg gtaaaccaga 420
aagtgaattc cccgtatcat caatcttaga tgaatatcca ggagtggatg gtgaaaatac 480
aaataaaaca aagaaatc 498
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<210> 359

<211> 749

<212> DNA

<210> 362
 <211> 420
 <212> DNA
 <213> Ctenocephalides felis

<400> 362
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 ttccgtatct tcacattcca cacttggcaa tccaaaatgt gctctcatta ggtattcttt 120
 accacctgga aatgatttta tggaccaagt aaatgcattc aaatcaggag catatttaac 180
 acttccaatt gttgttttta acttcgggga atctgcatca gctggtacag gaatcagtat 240
 ctccacatta tttgcagttg accgtctttt aaattgtgac ttagctttga tcatgtattc 300
 tacacggctg tgtgcgtgcc tttcaattac tgattcaatc catatcaagg gttttacatg 360
 tgtgttaagt cgataagaca ttaactcaaa ctctocatca ggaggaataa atgatatggt 420

<210> 363
 <211> 218
 <212> DNA
 <213> Ctenocephalides felis

<400> 363
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 tttggcttan gggntgggaa tccgganggt tccattggtt tcattcangt ttgaacttgg 120
 agcanttgng gatgggctta tttcatcatt cggttgantgn ggntgggcgt ctttaacgtc 180
 actggtaaata aaacgcctgg gcccanggtc aagtctgt 218

<210> 364
 <211> 432
 <212> DNA
 <213> Ctenocephalides felis

<400> 364
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 tcgaccacaa aataaatatt gattgcaatt actaaaatcg atagaaggat tgcaacgact 120
 gaattaaccg ctccattaac gaattctccc atgatatagcag cattgctggt aaacgctata 180
 gtcggtaggg tcgcaaaagg tagttgtaag gacatcactg cattcagaag gtcgttcata 240
 cccgataggt cttcgatgct attgaaaaat gccatcagaa atgttggtat gatggcaatc 300
 attcgggtga ataggatcct cttccagcga gaccattgta ggttgaggaa accctccatg 360
 gcgaattgac cagcacaaagt cccagtcatt gtagaacttt gaccggctgn caatatttcg 420
 acagnccaaa tg 432

<210> 365
 <211> 390
 <212> DNA


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agaaaatgat tcagtagcaa cttctgaatt ttctttgtaa tcgataatac tttctcaaag 120
tataattgca tttcacaaca cactgacgaa atatgggtat ggtccatag aagcaatgct 180
cgttcttcta tccacttgct tctgataaat gttcgggtata aagaatgcaa tcaactccaca 240
tgctatcaga gatgttcctg atattaaaaa tgttaaatcg caattataat ctagaattat 300
tcctacaaca ttgcttccaa caacacttcc taatcgaccc atcattaaag atatacatat 360
tgccattgcc ctgagttgtg tagggtacag atctactaat gccgcgttta ccactgtcac 420
agcaattccg caaaccagca accacaaata taaatatgat gctattgtta aatgttcaat 480
aatgcacaa attattcc 498

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<210> 369

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 369

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tcacagggtt tggaatttc aattaccttc ttctggctgt gagtggatgc gtattagtat 180
gtgttttgat ggaaactctt ggaatgagtt ttgtcgttcc ttcagcacia tgtgatctgg 240
aattaacaac aaaacaaaaa ggaatattaa gcgctatagc ttttataggt attataagca 300
gttcacattt atggggattt ttagccgata cgagaggag gcggaaagt attatgcta 360
cacttcttct tgcatttttt tgtaccttg catctagttt tgtaaattca gtttggctgt 420
tattttgctg cgatatttca atggattttt cgtatctgga ggaagtgcac aatatatgca 480
tatttaggag aattcataat cctaggcatc gcacagggtc attatggggc gtcaagcatc 540
ttcgatttg 549

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<210> 370

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 370

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gcagggtgatt tgagaaaaat caacgtttca atagtcgacg agtttgattg cttcctattt 180
tacatagaag aacaagaatt tacaaaatat cagctttgtg cctcctcttc taaaaaacat 240
atgggcgctt gtaaagggtga tattgnatca ccattagccg tagatgggtct tatagtcgga 300
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gctgaatatt tcatgtggat cgaccattct ataaaaatat tcacctaat taataactat 420
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atattcatca cacttggg 498

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<210> 371

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 371

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atttctataa atcttaaata catattttga attaaagata gtaaattaac aatggcagcg 180
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ttacaaatga ctggagaaat accagccaca aaaatagctg ccttacaaaa agttttacaa 300
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caaggttctg aagacataag agcatcagca acagcaaagg ctactgttgc agcttttgca 420
gccagtggag ccatgccatc caogagttgt tgaattccta agacagatga aggcttaggg 480
tttaatgtat ggggtgaaaa gaacaaaatt ctccatatca tatcaagaat atccagtgg 540
gagctgtcg 549

<210> 372

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 372

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acatatctag tgcacttcag caacttgaga gcatcaagac agcaatagat gactcccatg 180
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attcccaca 549

<210> 373

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 373

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agttttcgat attctgcaaa taataatgat cttaaattac aaatagaata ttacatttaa 180
cagctaagaa tttgcagttt cacaaatact gccagtcacc aaatggattt cagaatatca 240
ttcaaaacaa ttttagccaat aatgtaagat gaaatacaga tgattataga aacattcaga 300
atttatacac tataaatatg aacattaata ctatgtacca cttaaaatgt gaaatctgaa 360
tacgtcattt gatgactgcg tgtaacaaga acttgttata gattataaca attataattt 420
aatatatott tttcattttg taacccccaa agagcattcc tcgcgtcttg cagcacttgn 480

ggggtgtggt agtgtgatga tgatcatgta gatggtgatc cttatatcac gggtgggtga 540
cgagattat 549

<210> 374
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 374
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aagacgatgt aacaatataa gatttgtgac gttgaatcac atatatgtcg gtaaagtatg 180
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aatagctaaa cctaataagag tctccattcc atttgaagc aatttataca taccacata 300
tatatgcaaa tatatatata tatatatata tatatatata tatatatata tattatTTTT 360
aaatgctgga ccatgtttct tctaaatntg agtttaatgt ngcattcttt cgatatcgaa 420
tcattagttt tatgttttta taagggtgat aattatttca taagactgtc actggagaaa 480
tatgttattt attaatTTAA tattaattaa atatatatat taccactat gtataaatgt 540
tcataaatc 549

<210> 375
<211> 549
<212> DNA
<213> Ctenocephalides felis

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ccaacattgt gtatattcat gtcaaatata ttgaaaatgt tctattttaga tgtgaaactt 180
gacatgatTTT aatttaattt aaatatgtat tttactttgt tcatgataaa ggcatttata 240
tttaaaaaaa tatattttac tatgtgtatg taagtataca tgtacatgca tacatacata 300
tatatatata tatatatata tatatatata tgatggtaga ggcttggatt tgtaaatatt 360
ttgaagagct tcgaacaaaag aatccaaagg taataaaaaa ccacaaagtt tgttgaaaca 420
atTTTTTTTat ttactgtcgc gtttcggaac taagtatggt cacctgcagg acattgcaag 480
aacatcatct taaacaagca atatacttag tagaataaaa tgctggattt tataaatgac 540
aaattgnga 549

<210> 376
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 376
atggaatagt gctaacaaa gcaaagataa accaatctcg cgtogccac atcagtaacg 60
gcataagaat cattccactg gtccaccgca tggactgcat catggcaatg tgtgctctat 120

09919361650

<400> 379

ttctgttcga agtaggaaat agttcgagtg tatgcaaaat aactactgca aatactgcac 60
tcatgaataa acgaccaata agtgaaatta ccattaatgt ataagcataa tctaaactga 120
aagatagaat tggatgaaa cacgccgtag cagacataaa taatagaaag tttatagttc 180
ggcgtccaca aaatttcagt agcggcaaag gtatgaaata acttatacac tcaagcgatt 240
cactcataat gccgtatatc attttttcga caggcaaatt aatatcgttt attgccatag 300
catagtaacc gagagcactt gaaaaccaag taacaaggca aataagtaat ctatgtctca 360
tttctgtatg cttaagtata tcagttatct ccacaaaact atttttaact ttctgccagc 420
aagatggttt tttaccacca tctgcttgag t 451

<210> 380

<211> 401

<212> DNA

<213> *Ctenocephalides felis*

<400> 380

agtccactca ataaagtagc gacacctccc atcgtcagtg ttatgttatt aatccataaa 60
acattttacgc tagtatttga agccaaaacc ccgcatatca ccctagtcaa tgtgttagat 120
ataccaatag ttgataacaa ccaagctgtt tcatcatcgg tcattccgct gggtttgttt 180
ctctgagcaa tatataggaa tggatattaag taacccatca tagtaaagaa accactgaag 240
gcgagcaaaa ggaatgacgg cgaacgcato aagttcatat ctaacatggg agcgagagtt 300
cgacggaacg cttctgggca aagcttgcaa gaagactgtt cttcgacatc cgcccgagta 360
ggtaatctag ttacggacat gtggtatcca atagaagtcg t 401

<210> 381

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 381

ggccctggac aagatgccct tcgactcacc accgaatatg gagctgtcta cgatcaaaaat 60
gccaccattg aagttcttaa taaacagaag aggaaaactt tgtgccacac tgatggcgaa 120
ggagttgaat gcgaaacaga agaagggagc atcgcacctc aaataatact atttgttgcc 180
caattaatth ctggagtcgg tggatcttta tactacactt taggtgtatc ctatatggac 240
gataacacca aaaaatctaa aacaccagca ctgatgagtt tttcttattt tcttcgtatg 300
ctcggacctg caaccggtta tgccttggct agcgtctgtc taaagttcta catttcgcca 360
acgttgacgc caacaattga taataatgat cctagatggg taggagcatg gtggttaggt 420
tggttgatac taggatcaac ttttaatttt tttgcaacgt tgattggatt gtttcctaaa 480
atctgccaaag agctgcaa 498

<210> 382

<211> 461

<212> DNA

<213> *Ctenocephalides felis*

[illegible]

<212> DNA

<213> Ctenocephalides felis

<400> 385

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tcatgaaaaa ccagtcgaat atgtagtttt actaggcttt ttagctgggt gcattgaact 120
tatgatggga ttactgaaac ttggatTTTT agtcgatttc ataagtgcc caatcgtatc 180
gggtttttaca tccgcgatgt cgtaaataat tatttgtgcg caggcaaaag gtttgctagg 240
gctgcattat acaggacatg gatttgtgga tacattgatg cagctaatac aaaggatatc 300
aaatgcgaga ttagctgatt ctatacttgc cttatgctgt atagtttttc ttttaacatt 360
aaggcaataa aaagatttga aagtctccag tcctgtttta aaaagaacct tatggtttat 420
ttcaactgga agaaatgcct tgatcgggtt aattacagcg ttgcggctta cttttgggaa 480
angaattctt ggnaagcc
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<210> 386

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 386

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aatatTTTTa attcataata tgtatatgat tgaatcgcca agatggttgg nggagtcgat 60
gtaaaataga acgatgtgaa aatacattaa aaatcatttc cagcgatanat aagacaactc 120
ttaatgaaga tgcaattaga gtgttaagag aaaaatcctc aggaaaacca gaaaaagttt 180
acggaatcat gagtttattt tctagtttac gtttagctag aaatactaca cttattgtgc 240
tttgctggat tgtatgttcc gtgacgtatt ttacattaat tttgaacgtg agcaatatgg 300
gaggtaatcc attttotcaac tttttatatc aatcggcagt agaattacca gcatacttac 360
taggacgttt ctccagcgac agaataggaa gacgttggac ctctgtagct tcttttgtaa 420
ttgctctggc agcatcttca ttcttatatg cattgccaat gatgaatccc tccagaattt 480
ggccccactg tagccgcg
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<210> 387

<211> 396

<212> DNA

<213> Ctenocephalides felis

<400> 387

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atggattcat gtgccttttac ctttagtatt tgccgaatat ttttcacagg agagatttcc 60
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tggttgattt attcgagatg caacacacag ctacataata tgtttccatg ctttgactgt 180
gtgtttactc atttgctgta taccatggct tgccgagatg gcgtgggtta aaatgaaaaa 240
taagaaataa atttaagaat taagttaata ttaatggaaa aattatatat agtttatgtg 300
aattttatca cacgtgttat atatctttat aaaagtaatt tataaaggat tgtcacagaa 360
aatataaatg acaaaaaaaaa tgtttttnaa aaaaaa
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<210> 388

<211> 203
 <212> DNA
 <213> Ctenocephalides felis

<400> 388
 agagaacatt cggaagtgaa gatgcctgtg aacaagcatg atggatacca aatggacttg 60
 gacagtatatt tgaaagagtt gggacatttt ggaaaatttc aacttctgaa ttgcctgttt 120
 atttgcatta caatattgct atttgctatg tatgcgatga gctatgtgtt cacagcggga 180
 gtagttaatc atagatgttt agt 203

<210> 389
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 389
 gtcnntcggg cagtcgggtc tgactcgccg tacaagatag tgattcgttt tagtgcgggt 60
 gtttttgttg ttgaacttat gtgcctttta cttaaacttt tcaaatttat tcaatttcat 120
 caagtttttg atttcgactg tgacgtacct ttaacaaata ctaaaaattt gaaaagataa 180
 aaaattgaaa tcgaacaaaa taaattaaag taaaaaaat ggagaaagat atggaaaata 240
 atgaggacca aaaagagatc aaaatggaat cgggcgaaga aagcatgcga ccagttttaa 300
 acacacctga tccagtcgcg actgccacag taatagttcc tcctgatgga ggatggggct 360
 gggcatagtg agccgcatca ttcattgagca acatgatagt ggacgggtatt gtgttctgat 420
 cggaccaata attgaagaga tcaaatttca tttggtgcaa gtaagctaaa gtagccctta 480
 tcagttcgtc gtctccggat tctatctgat ggtggtcttt tgtagtggct tgcgaatcga 540
 ntgggttcc 549

<210> 390
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 390
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 tgcaacaata tgtcttggca tttggcattt gatgctgcac ttggttgac tatgtgttct 120
 tgtgataatt ttgcattctc cgaacctgat aaaccaattg gagcaccag atcaatcaat 180
 gatgggtgta ggtgttggtt ctatttctcg ttataacgga gacaatagct tggttaacaa 240
 gggtgatgat aatggaacac ctttgggaga aatggagcat cctccatag catatagaga 300
 ccactcactt acatatcatg atgtggacat ggggtgctctg gttacaattt gtacactggc 360
 cataacatta atgatgttat atggagcagt taaacaaaag cctgcacata ttttgccatt 420
 cttctgcttg caactatttg attttgcata actacactta ctgcacagga tatttggtta 480
 tttgcgcagt gtcatagatt gtatcagaaa gtcgcattac caatgagaga agacttttga 540
 actaaccce 549

<210> 391

ttcgcccg

129

<210> 395

<211> 427

<212> DNA

<213> Ctenocephalides felis

<400> 395

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actgcttgac caaaatcttc aagtctgatg gtctccctgg attgtaccgt ggttttggag 120
tatctgttca aggtatcatc atctaccgtg cagcatactt tggattctat gacaccgtc 180
gtggaatggt gccagacccc aagaacaccc cattagttat cagctgggcc attgcacaag 240
ccgtcacaac tggtgctggt attgtgtcat atccattcga cactgtccgt aggcgtatga 300
tgatgcagtc tggacgtgca aagtctgaaa tggtgtacaa ggaacactg cactgctggg 360
ccaccattgc caagacagaa tgaagtgggt cttcttcaa gggagctttc tccaatatcc 420
tccgtgg 427

<210> 396

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 396

atccaagaaa ctttaaaatg cacatctagg gaaactgatt taccaccaac accatgggtg 60
gcaatttggg catctgttcc attgtgggca cttatttgcg cccagattgg acacgattgg 120
ggtttcttca caatggtaac agatcttcca aaatacatga acgatatttt gaagttcaac 180
atctctgaaa atggattata ttctgtctt ccataatgtcg tcatgtggat cgtgtcgatt 240
ttatcagcaa tttgggtgca tcatatgttg aagaaaaaga tgttgagtgt caccaatgcc 300
aggaaattat tcacaacgat agcatctgtt ggtccagctt gttttattat tggagcatca 360
tttctgtggt gtgataaaac tcttgttgtt gcttgttca ccattggaat gggtttcatg 420
ggaactttct acgccggtat gaaaattaac gcattagatt taagtccaaa ttatgcgggt 480
cattgatggc cattgcaa 498

<210> 397

<211> 305

<212> DNA

<213> Ctenocephalides felis

<400> 397

caatcatgat gatcctaggt cctaattcct tccataaacc agcaaagcca agttttttgg 60
cagcgtaaat ggctgttgct ctttgtctt gatttagctt ggaaacaact gtgtctgcag 120
gatgagaaac tactgcacag aatacacgg caatgtaacc agcagcaaag gtgacaacca 180
attgttcacc tttagtgcatt totgtctctg gtttgggaac cacatgagtg tataacaatt 240
caactgttct ttcgaaacaa gcaaacttca tcatggtata tgggatttgc ctcatccaca 300
atggt 305

[illegible]

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<400> 400
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accaccagag atgccagaat ctctcaagaa gaaattagct gccaacagt aaaaatagat 120
ctgtgatgat cctctcaata atgcatgtat cagcaatatt acaattgaaa ttgcaactaa 180
catctaaaat agcagtatca gtgatggact attcaattta gtaacaatgc tgtctaactg 240
gatcacgttt ttcattccaa attttaattt taaatgaaat aggcaattat aatagtatta 300
caatttcttt taacaaattt gtgaaaaacg tttctggttg atgtgtaaat aaacaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaa                                     383
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<210> 401
 <211> 188
 <212> DNA
 <213> Ctenocephalides felis

<400> 401
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 catgggtgta gcaaattccag gcatagtctg gatacgaact ttagcagctt ccatgggagc 120
 taaagcaatg tcagcaaaga attctgcact agcagaagcc gacaagtaaa gcgatgtcct 180
 ccataagt 188

<210> 402
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 402
 tttttttttt tttttttttt tttttttttt gggtatataa aaatatttgt actatagnta 60
 gttctaaata tacatttggt cacaataata taaatattat ataatcattt gtaaaaaaaaa 120
 ttaatataaa aatctataca aatatttatg ttataaatta ctataacaac ngttacaatg 180
 aaagaaaaaa atagcactac tatacacaaa gtctttgggt atatgaaaaa tatttaaatt 240
 caatctaatt aatttttttg ttttgcatga tgtaagattt taccatgcct tttatatcag 300
 tgaatataaa agtgcctata aatacaagtg cagtaccgat ccaatgtatg attgtaaatt 360
 cattattaaa atatacaata gagaacaatn atgacacaaa ttttctaagt gtaataacta 420
 aggnactgt taatgatgaa cattctgtag tcagencatc nctgggcttt tgccnnggtt 480
 tnggggttatt nontttcccg 500

<210> 403
 <211> 487
 <212> DNA
 <213> Ctenocephalides felis

<400> 403
 attattactt ttataaaaaat ataaatctat ggatatctat ataagggaga ggtgtgggna 60
 acctacatga ttaaagtatc actttttattt aattaattag ctattatgta taggtaattc 120
 tatttagttt tgtttaatta attaattact cagccttgct tattattatc gatttcgata 180
 cggaaagcca aatcctgcat cgagtcgtgc tttagaaggg acttcttttc gggatcttta 240
 acttttctga ttggtttttt gttttttacca tatctatttg taacaccatc atcctcgtcc 300
 atcatcctta aaatagttaa ttgatccgat gaatctaagg gggccacaga aatatcacga 360
 acggctctga atttaccaca attattcaaa tgttcgtttt ccaaacggaa gaaattccat 420
 acaaacctcc taaacacttc caatggtgac agtatagatg taagaatgtc cccgctcaca 480
 aaattgt 487

<210> 404
 <211> 343

<212> DNA
<213> Ctenocephalides felis

<400> 404

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tttttatgct gatttagggg taattaaatt agcagaagac atagagttaa gtgataagggt 60
gcaagctgta aacattcacc aaagtgaat ccaagggtgt gaggaatgca aagcaactgg 120
atggggtcga ttgggtgccg gtcaaccaat accaaatgct ttgcaacagt tggcaaccac 180
tgctttaagt aatgagaagt gtaaagaagt tactggattc ttcgagccca catcgcaaatt 240
atgtgtattc aaaggatctg gaaaaggagt ttgttttggc gattctgggtg gaccttttagt 300
ttacaatgga gaacaagttg gagttgcac atttatattg ggt 343
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<210> 405

<211> 387

<212> DNA

<213> Ctenocephalides felis

<400> 405

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ntgtcaacna tttgcaanta tttgnaatt tggcnaccat tanataatta ccccccancna 60
cccanantgg anacggcccn aattggggta ccanaccttg ccanacnanc nggtttgnca 120
nanttngtgt anacaanatt tgangtantt tttaccaaac cnatnlnatn gtggnangtg 180
tnccgggttaa attggttatn aacnatnatt tgggcaactt tgtanccaac nccgccanca 240
tncaaanagt tggtnccaac nacaanaaga atancatttg ganattttatt taanacccaa 300
ttaccaccat taanaancca acnattgcng atnatggaac caccacanaa ttgtccttgg 360
ttggtttctca aagacacat aaaagggt 387
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<210> 406

<211> 127

<212> DNA

<213> Ctenocephalides felis

<400> 406

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aagagggcca ccggagtctc cagagcaagc gctaaactcca ccagtcaagg gtccagtgca 60
caagtttggt ggggtgcaatg gagtagatcc ggctcctcct agagcctttt cacactcggg 120
gtatggt 127
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<210> 407

<211> 415

<212> DNA

<213> Ctenocephalides felis

<400> 407

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cgaagggaac aactttgagt gtaactggat ggggcgccac gaagggaatgg gggccaattt 60
cgccaaagt tacaagaagt aaagttaaag cttactcaag tcaagaatgc aagaacagtc 120
atgtatttaa cagtgcacac atttctgaca gtatgatgtg cgctgggttt cctcaaggac 180
aaaaagatac ttgtcatggg gatagcgggt ggccacttgt agatgaaaaa caggttcaag 240
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taggagttat atcctggagg cgaggatgcg cgcgacctgg atatcctggc gtatatacaa 300
aattgagcca cccggaaatc caacagttta ttaaaaacaa tgtaaaattt taaatcataa 360
aactgtatga ataaacaatt acgaaaaaaaa aaaaaaannn aaaaaaaaaa aaaaa 415

<210> 408

<211> 445

<212> DNA

<213> Ctenocephalides felis

<400> 408

cccaggatac aatccctata agtttcctgt ttttgtcaac taatggacca ccataatcac 60
cgtgacaaaa accgccacct tttgcagaac cagcacataa cattctatca gtgattctgt 120
ctggttttcc tggttctgca taattacttt gacatactga agaatctatc anaggaatcc 180
aagcaccaag taattctgaa gaatcgtttc cttcggtctg gttagctccc catcctgtta 240
cataaactaa agatcctaca ggagtctcat attgctcatt agctaaattt acaggctcgac 300
tattacacac tgtaagttaa ataggatttt taactttaac cagagcgaca tcataatcaa 360
aggctccttat attaaatttc ggatgtaaaa ctatgtcggt tacctcgtat acatttccat 420
ttgaattgtg gtaggaactt cctgt 445

<210> 409

<211> 445

<212> DNA

<213> Ctenocephalides felis

<400> 409

aggaagttcc taccacaatt caaatggaaa tgtatacgaa gtaaccgaca tagttttaca 60
tccgaaattt aatataagga cctttgacta tgatgtcgct ctggttaaag ttaaaaatcc 120
tattaaactt acagtgtgta atagtcgacc tgtaaattta gctaatgagc aatatgagac 180
tcctgtagga tcttttagttt atgtaacagg atggggagct aaccagaccg aaggaaacga 240
ttcttcagaa ttacttggtg cttggattcc tctgatagat tcttcagcat gtcaaagtaa 300
ttatgcagaa ccaggaaaac cagacagaat cactgataga atgttatgtg ctggttctgc 360
aaaagggtgac ggtttttgtc acggtgatta tgggtgtcca ttagttgaca aaaacaggaa 420
acttatangg attgtatcct ggggt 445

<210> 410

<211> 352

<212> DNA

<213> Ctenocephalides felis

<400> 410

gacaatctaa taagggccac atcatgttcg aaagatgtaa agttggtgtc aaagtcggga 60
tgtaataaat aaaaattggc atccacaatt ataccagcgt aataagccct aaagctgcc 120
actcgaactt gaacttggtt ttcgttgcgg acatttttga agcattgagc aacagtgagc 180
acaaaatata tactaactat gactcctcca caaatatgat cacctctata taaaacagat 240
gccacgtaag gtaattcgct gatgtcagca ggctttcctc cgatcatacg agaatcggtc 300

aaatTTTTgc tttctgctcc agaaaataat acaataaaga aaattgcaaa gt

352

<210> 411

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 411

tggatatagaa taaaatTTTT ttataatcag aaattatctt cgctttaact tttgatgcat 60
attatTTTTat gagatatatt tataataaat attttattca gaattgttca ataaaacatt 120
gtccgtgttt ttgtgaatcc agtccaagaa gtgatatact cttgcataga cgtctggcac 180
tcctgtgcc catggaatac caaaagatac tactctggca acaactggc catcagggtc 240
tcgaacgatc agaggaccac cggaatcacc catgcataca ccaatgccc gtttccggaa 300
agcacacagc attgtttcag ttatatcatt ttgtctagaa actttattct tgattgggtc 360
ttgattgaga aatTTTTggc aaatgcgact ttcgtagag ataccatca tttttgtaa 420
atgatctggt atttgaccaa atggagtagt ttgtcccaa ccagaaactt caacagtctc 480
tccgccatgg tatcttct 498

<210> 412

<211> 386

<212> DNA

<213> Ctenocephalides felis

<400> 412

cttttatggt gtctttgaga accaaccaag gacacttctg tgggtggttc atcatcagca 60
atcggttgat tcttactgct gctacttgcg tgtaaataa atatccaaat gatattcttc 120
tcgtcggttg aaccaacact ttgaatgctg gcggagtagg atacaaagt gcccataa 180
tcgttcataa ccaatttaac cagaacacat accacaataa catcgcttg ctaaaaacta 240
catcaaatat tgtatacaca aactatgtca aaccagttgg tctggcaagc tatgatacac 300
caattggagc agtatccact ctggctggat ggggctactt atctaattgg ggcaaattcc 360
caactacttg caaatcggtg acacgt 386

<210> 413

<211> 348

<212> DNA

<213> Ctenocephalides felis

<400> 413

ctcatctacg gtcaatggac ctccagaatc tccactgcat tgtgctctgt cataatctgg 60
ataagctgcg caaatTTtgct ctttataaat ggggtctaaag tgcaaatcac cacattcctt 120
ggatccgacg atctggtagt gcaattcttg cagatgtgtt tgcaaaactc cgtcggtagt 180
agaatttatt ccccatccga caagagtagc tgggtgcattg tgtttagttt gttcatttgc 240
ttctggcaaa gtaactggtt gcgcaaattt actatatTTT aagggttcag atagcttgag 300
aagtgcaatg tcgttgatat aactgttact aggattatat cctttgtg 348

<210> 414
 <211> 147
 <212> DNA
 <213> Ctenocephalides felis

<400> 414
 cattgccatc taatgagttt gatcccatat agacggattt taaaatgccg ggtttttaggc 60
 aatgtgcagc cgtcacaaac caacgtttgt tcaagatgga tccaccacag aaatgctcta 120
 ggtctcgatt tctcaatgaa acttggt 147

<210> 415
 <211> 467
 <212> DNA
 <213> Ctenocephalides felis

<400> 415
 ctttacatat tgcagttggt cggggtcgtc ttcattcttc cctaaatttc cccagccagt 60
 aacagtggnt aattctcctg atggcatgtc tttccaaca tcagtaagtt tgactgttct 120
 aacagntctg ttattcaacc ggaatggtct tcgaaccttg atgagggcga catccatata 180
 gatgtcagtt acattaccgt atgcaggatg cttgataatt tgtgccacag gatgaacgga 240
 accacgtctt ccttggaaac tgggtgccgac tcgaactgaa tacgtgaatt catcatatat 300
 gcaatgagct gctgtgacaa tccaataatt attcaatatt gaagctccac agaaatgttc 360
 gttaaatact tggagtgaag cttgatagcc atatttgga atatcagcat cttgnctcca 420
 acaatgogcc catctaatac atcctttatc ttgnaagatg agacggc 467

<210> 416
 <211> 346
 <212> DNA
 <213> Ctenocephalides felis

<400> 416
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 caatgtaggt ttaattatga taacaaagga tttcaatgaa actagaagaa gccgacctgc 120
 caagctcgta gaggc aaatg tcgacttgcc tgtaggctcc tttgtcacag ctactggatg 180
 gggatctgaa acgataccag gagcacctat gtcagaaaat cttagagcaa tatctttgca 240
 cgtcattgat aatcaagaat gtcttgaaaa aaatcaagag ttgattgatg tcacagacaa 300
 aatgttttgt gctggatcaa tagaagataa aggaaaatca gtttgt 346

<210> 417
 <211> 312
 <212> DNA
 <213> Ctenocephalides felis

<400> 417

<210> 421
 <211> 447
 <212> DNA
 <213> Ctenocephalides felis

<400> 421
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 gtttaatttg ttagttgagt atcaaaattt tgtaaaacat ctogtcttag ttagtctcgt 120
 ctttagtcatt gaaattaagg aatatcaaaa aatatttgta atattataag ttaaaactct 180
 tatattccag tgtgcatttt gataaattct cttattgggt ttgaagccac tcgggtatat 240
 actcctggga tttcgggtcg tgcacatcct attccccaag acactattcc atgcagaact 300
 cccttagagt tgacgagtgg gccaccgcta tctccttggc aagagtcott accgccttca 360
 ggataaccag cacaaatcat attttgggta attattagtc cttcatttcc atatatagtt 420
 ttgcactgag tccagttaac aataggt 447

<210> 422
 <211> 367
 <212> DNA
 <213> Ctenocephalides felis

<400> 422
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 tgatttttaa attttaacat gtttactgat aaaatctcta acaattgggtg atgaaattng 120
 tgtgtatact ccgggactga ccgcccttgc acaccgctcg cccaagata cgatccccac 180
 aagagtntta ttttnntnga caagtgagcc cgcgntgttt ncttggcacg aatccttttn 240
 ttcgtcaaga aatccagcnc aaagcatgtg ttntgtcaat gtataacgag cagcatacaa 300
 tattttacag aaagaaaagt caatcactgg tatagaaacn ccgcgaaggt tttccgaaaa 360
 aacttgt 367

<210> 423
 <211> 432
 <212> DNA
 <213> Ctenocephalides felis

<400> 423
 cagatgtata tgcaagagta tactattatt tggattggat ccatcaacat actgataatg 60
 nntctattga acaactcaga ataaattaat tgaaaaaata gctaagttat catagtaaag 120
 atcttgacgt ntttataaga tttaataaat aaaaaacaat catagataaa aaatcataga 180
 tagataaacc atagaatgct gttcctttgt atggcaaact gacaaattga ttttaatcac 240
 taccaaatta ttttttgtaa ctatgataaa atattctata aaactattcc tactaattta 300
 tgttatagat gaggtgatag tataggtcag tcagcatatg tgatatttac cagtatatat 360
 aagttgaaac cattaaattc agtattacgt gaaataaatg caaaaaaaaa aaaaaaaaaa 420
 aaaaaaaaaa aa 432

<210> 424
 <211> 354
 <212> DNA
 <213> Ctenocephalides felis

<400> 424
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 tctggataag ctgcgcaaatt ttgctcttta taaatgggtc taaagtgcaa atcaccacat 120
 tccttggatc cgacgatctg gtagtgcaat tcttggagat gtgtttgtaa aactccgtcg 180
 gtagtagaat ttattcccca tccgacaaga gtagctgatg cattgtgttt agtttgttca 240
 ttggcttctg gcaaagtaac tgggtgcgca aatttactat attttaaggg ttcagatagc 300
 ttgagaagtg caatgtcgtt gatataactg ttactaggat tataaccttt gtgt 354

<210> 425
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 425
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 accaaatggc tacttcagcg gttttggata aaccagttgt taactagaca aaaatacacc 180
 aagtgccaaa tatgatcctg ccaaaccttt ccatgtttat aagtagtgcc aaacaaatta 240
 tcttcggcga ctgaaatatt ggacaacttg catgcatttt tgactatttt aaattgaaca 300
 gttcagcatt atttatgtct ggcagaataa cagaggcaaa acaaacaat gncgatcaaa 360
 tattacaatt cgatgngctc ttaatttgca taaatataga tattatacta attcaaaaag 420
 caatctgctt taaaatgaga atataaagga gcaagncgct agttttcttt tacatggtaa 480
 aatatcgaca acataaga 498

<210> 426
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 426
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 gtgaaagttc cagctatctc tcccaaagat tgtgctaagg ggtatccacc ttctggaggt 180
 aaagacaaaa ttacagacag natgttatgt gctggtcttn ctgaaggagg taaagatttc 240
 tgccaaggcg acagtggcg tccactggta gatgaaaata gaaagcaagt aggagtgggt 300
 tcttggggtc aaggatgtgc cagaccagga aaaccaggaa tttatgctaa agtgtcacac 360
 cccgaaatca gaaaatttat tgaaaaatat gctaatgttt aagtggattt tatttcaata 420
 taatgtgatt taagatactc tttaatggta tgtaataaat tngngataaat taaataataa 480
 aaattggaga actggaaaaa 500

<210> 427
 <211> 360
 <212> DNA
 <213> Ctenocephalides felis

<400> 427
 aaaatcgaat cgttggtggc aatgatgtaa gtttttcaaa aaatgggtgg cangtatcag 60
 tgnaaagtaa taaccaacat ttctgtggtg gttcaatcat tgctaaagat tgggtgctga 120
 cttctttctca atgcgtcgtg gacaaacaaa gtccaccgaa ggatttaact gttcgtgttg 180
 gaactagcac tcacaatgat ggaggaaaag tgtatgatgt tattgaaatt ataaaacatc 240
 cgaaatataa taaagcagtg ccagatgatt ttgatgttgc acttttacgg atcaaagagc 300
 caatatcatt tactccatgc acagtaactc ctgtaaaatt aatacaatcg ggaaaagaag 360

<210> 428
 <211> 266
 <212> DNA
 <213> Ctenocephalides felis

<400> 428
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 agatcgtctt catcataagc gtctccgcaa atcttacgag ctacaacatt ccattcctct 120
 attacatcat cttgtgggta gaactcagaa agatcagatg agtaaggctc tggttcacct 180
 ggactgatgt tattgtctcc catatatgtg attaaatcac ggaagtcgac atcacattga 240
 attggatttt gtgaaaaatc aatagt 266

<210> 429
 <211> 328
 <212> DNA
 <213> Ctenocephalides felis

<400> 429
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 agtccttttg cagcagggtg ccaattagta ggtattgttt cctgggggtg cccatgtgcc 120
 actggtgtcc cagatgtcta caccagagtc tatgcttacc gcgattggat cagatattac 180
 actggatttt aatctcctaa actcatctca tttgttatat tgtaaattat gtaaataaat 240
 atgaaaaatg tataatgaaa atacttgta aataaaagt acttttatta agaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaa 328

<210> 430
 <211> 235
 <212> DNA
 <213> Ctenocephalides felis

<400> 430
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gngatatcgg ttactaaata ccagtatggt tcttcacaaa ttctcttatt tctggatcag 120
 ctagtcttgt aaatacatTTT ggatatggaa aacttgtgca atttctagtt gaaaaagctg 180
 tcaagcctac taaaacccca ttttcgtcaa cgacgggtcc accaaaatca cctgt 235

<210> 431
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 431
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 aactcatcat tCGGaaattc aagtcagagt tggaagtaca aatgcttata acggaggaat 120
 aatcgtggat gttgaggaca ttacagtaca cgaactttat aatgaaaagt tcacaaatta 180
 tgatgtagct gttgtgaaat tagcttatcc attaagattt gataaaaaata taaaagcagc 240
 ggtactggca gaggatggat atgagccaga aataaattct aaggtcactg tatccggatg 300
 gggtagtttg agctaccttg gtccataccc agaagagcta caacaggtag atttgcaggT 360
 cgcagaccac gacgactgct cattgcttac atggcacacc tcgacctgcc gaaagtcaaa 420
 tttgtgctcc gtcttggtgg agtcaaagac tctgccaggT gactctggtg gcccctgctg 480
 agaatggcgt cgcgtagcat gtgtccttgg tgccgtgcgc ggaccagata tcagagttat 540
 ctagattgg 549

<210> 432
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 432
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 cagggtgtcac ttttattatt cggaaatcat tattgtggtg gagtaatcat tgacaaaaat 180
 tggattttta cagccgcaca ttgcattgaa aatgaaacaa atgccaataa aagatattca 240
 gttcgagttg gaagtagtac acatgaaaag ggcggaagaa tatacaaagt caaagaggct 300
 attttacacc cagaatatga tacttatacg gtggactttg atgtagctct gattcgctta 360
 gccgaaccaa ttgcattcac cgcctgcaca gtgcgcccaa ttcaaatagt agatgaagga 420
 gtaaaaacat tggatggggc aatgttaact gtaccggatg gggatccaga cgactggtgg 480
 agattaacta cagaattaag aacgtaatgt ccattattaa taagaaaaat gtgatgaatt 540
 tatttcca 549

<210> 433
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 433
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tgtggatggc aagtttcatt gcaaacattt gatcagcatc tttgtggtgg ttctataatt 180
aataatcatt ggatactgac agcagctcat ggaaatgctg atacttattc aattcgtgtt 240
ggaagctcta ggacgactc cgggtggtgt gtatataatg tcacaaaaat tataagacat 300
cccaaacacg atgaacaaac atttgatttt gatgttgctc tggtagctgt taacacacct 360
atcaagttta cagtatgtaa tagtaaattc gtcaaaattg aagaaaaagg catcgaaaca 420
cctccaggaa aaatggtcca agtcacagga tggggtgcag aacaagctgg aggtcccgt 480
catatttcct gcaggaacat ggttctattg nagcaatgga tctgcaagaa atatgcagaa 540
gattaaaac
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<210> 434

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 434

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catcattggc aaagaatgga ttctaactgc tgcgcattgt gtaaccaa atgaaaacga 120
tatcgaaggt ttaaaagtta gggttggaag caatgagcat aacaaagggt ggcgtttata 180
cgacattaaa gaaattaaaa aacatccaag atataacgat cgaaccgat acgattttga 240
tgctgcttta ttacgcattg caaagccaat tgcatacact gcttgcaactg ttgttcctgt 300
agcattggca gaaactggaa aagaagttcc agaaggcgca ctcgttagtg tcacaggatg 360
gggggctact atggtgggag gccagcatca acgcatctaa aagggtgtaa ggggtccaatc 420
gtgtcaaatt aagaatgcaa caaaaattat ccattcctgg aggtctggat gacaaaattt 480
cagacagcat gttttgcctg gttcctgaag gcggaaagga ctcgtgtcaa ggagangcgg 540
tggcctgta
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<210> 435

<211> 465

<212> DNA

<213> Ctenocephalides felis

<400> 435

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attgtattca gtgacaaagt tcaaccaatc aaaattagca aaagaaatat caaggatggt 60
gaaatctgca aggocactgg ttggggtcga ttggcggtat gggccccagt accaaacgaa 120
ttacaacaag tggaaccac tgtaataaca aacgaaaagt gctacgaatt gtctcaattc 180
gttgaaccaa ctctgcgaat atgtacatta aaagaatttg gaagaggcat ttgctttggt 240
gattctggtg gaccactggt ttacaaagat gaactggttg gcgtttcttc gtttctcttg 300
tatacttgag gagctggagc ccagatggt tttgttaaag tgcgcgattt ccaatcctgg 360
atcaattctg aaattagaaa aaattaaata gatatcaatc ataatttctt gtaataaaaa 420
atggttaaat aaagacagca taatctaaaa aaaaaaaaaa aaaaa 465
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<210> 436

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 436

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attgctgaca acttogaaca agttgagggt ctgaagaatt tggaaaagga ctctgatgcg 120
tacaattttct ggacccatgt tggagcccca ggcaaaaatg tagacatcat ggtaccccca 180
cacaaacttg aggatttoga aagcacgatg caataccata gaataaacca cagtgtaatg 240
agcgatgacg tccagaaaga tatcgaccta gaagtttttg gtacaagtag agaagcttac 300
agttggacca agtatcaaga tcttgaaaca acctatgcat ggatggacag cttagccaag 360
gcacaccag gaaaagtcac tgttctcacc attggcaaaa cttttgaggg aagagacatc 420
aagggagtca agatttcatt cggaactggc aaaccaggcg tatttattga cgctggaatc 480
cacgcccgcg aatggatcac actgccactg cacttacatc ttaaacgaat tgtgactcca 540
aagacgccg 549

<210> 437

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 437

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cagaagttct tacaccgagg acgggaaaac aaaatggatt gccaccactc agttccagcc 120
aactcatgcc cgaaaggctt tccatgctt cgacgaacct ctttttaagg caactttcga 180
catttctata attcgacca aacatatggc aacttttaga aacatgaaac atctgaggaa 240
agatgaagtg gttgcagacc atoctaatcg actgaaagac accttcaaaa ccacactcaa 300
aatgtcatct tacattgttg catttgttgt ttcggaattc aaaagtgttt cccaaaaacc 360
tgatcaggaa tttgatgttt gggcccagacc caatgcatat acgcagggtc aatacagtta 420
cgatattgga aaacaaactt tggtaaatta gaagagttac tggctataat tcgngccaag 480
gatggaaaaa tggnatggna gcttttctgt tttctgagcc ttggagaact gggcttntac 540
ttcaggaac 549

<210> 438

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 438

aacaaacctt cgtggagggt ttgtttaata tcatccagcg cgcagcaacc tcaaagaaca 60
tgcacagaat taaagtctga cactctggac atccaatgcc aaaggggatt tcgctcagtg 120
ccctgcacca gccgatgca gcccgggacc agggcaaact tggcatgcaa accaggattc 180
cagttgtctca aagaaccaga gttctcgcaa attaatgcg gaaatgatgg gatttgggat 240
aattgtttgt tttcttgca accagaatgt ggaaatccaa caccaattga aactgttttt 300
aattcggacc cacctgtaac gtacttagca ggtcaatatc catggtatgc aatgttgttt 360
accogaaggg aagatttatt caaaggacaa tttctattca gttgtggggg gtcaataatc 420
aactcacgaa tgatagttac aactgcttat gcgctcataa gccagaaatc gattggatga 480
tcagagagtg tgtggatcta gtgtattcgt ttaataaaca gagatnttat gctagontac 540

gaatagaaa

549

<210> 439

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 439

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ttagtataaa atcggccatt taataacact agccatcagt tttcaatcga acgttgaca 120
agaaacatta aaggataaag gggtaaagga tattttggat ttttcaaat gaagttgcta 180
gtattatttt taacatttgt cgcctgcagt agcgcctgat ctttctttga tttggatgaag 240
gaagaatgga gttcattcaa gttggcccac aagaagcgt atgaaagtga aaccgaagaa 300
aagttccgtc tcaagatctt catggaaaac aaacacaaag ttgcaaaaca taaccaacga 360
tatgaaatgg gtttggaatc ttacaaacaa cgtatcaaca aatatgctga tatgttgac 420
catgaattcg tccagacttt gaatggattc aacaagacca gatcaaatgc cttcgtcttg 480
tggtgtcgaa aaattgcgtg gagcactttc atctctctgc nacgtagaat tgcaaacatg 540
tgactgcgtg 550

<210> 440

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 440

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ttcaattttg tgtctggtgg cgtttatgat gggtacaaac tttacgaaat aagaccccaa 120
acaaaatccg aggcctacga tttaatggaa tggcaagtaa aaccaggagt cgatttcttg 180
tccgaagcca ggatgctcaa tcaggctagc cagggttatga tctcacctga acttcaggag 240
gaattcgaag gatattctgg caatggtaat tatacttgga aagttgctga ggataacata 300
gagagacttt tacaagattt tgaaagaagc agaaaaaagt caagtgcgcc acgtgacgat 360
ggatttgatt tcaatgatta tcaaagatcg caaacgatca acttatacgt aaacaaattg 420
ccaaaacgta tccaaaatat gtgactgtta aggatgaagg aagaagtttt gacagcgaat 480
catcaaatct gtccaattac agatggatca attccaaaaa caagcgcgat ggtgatcgct 540
gtggtgccat 550

<210> 441

<211> 548

<212> DNA

<213> Ctenocephalides felis

<400> 441

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tttatgctga ggttggaata ggcatcctg taaagtattt caaacttgtg gttgacactg 120
catgggcaga aacatgggtg gcctcgaaac aatgtggatt aaaatgtgtt ggatgttgga 180

atcttaataa atatgactct ttggcatcat caacatttca agaaaacggt aaagaatttt 240
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tgttttcaaa agcagatgga gtattaggat tagcattcag cagtttatct attggcaaca 420
taatgccaat attttataat atggttatca acaattgatt aagaaaccta ttttttctat 480
ttattgaata gagatccaac gcaaatcatc tggttcatca tgatcgggca tcaaataccta 540
acattata 548

<210> 442

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 442

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aattccaata acgtacatca cgaatgttaa agacgattat aaacttgaat ggttcccgag 120
ggaagatgct caaaaaacta ttcaagtagc cgaagatgtc gaatggataa aactcaacaa 180
tgatcaaatac ggatactaca gagtcaatta ttctgaggaa atgtggcaaa aattgagcaa 240
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tgcccttttcc ttggccgaag caactttgtt gccctattca actgcttttg agatgacaac 360
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attcttcagc tgttatgata gaataaaatg ggatgtcatg atgatgaaaa cattnngataa 540
catctcnag 549

<210> 443

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 443

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tgctccttat caggtttcac tacaatttaa aaacttccac ttttgtggag gttctatttt 120
gaacaaatac tggatcatta cagctgcaca ttgcatgggg agacgttttg aggtagtagt 180
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agaagctcgt cttacaggat ggggcagatt aggagctgat gaccctgcac caaacgaatt 420
gcaggaattg aacactttta ccatcagtca taaaatttgc aagaaagctc accanatgtg 480
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cattgncga 549

<210> 444

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 444

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aagcataaag aaagttoctt atcaagtatc attgctccat tttaatggac accgtgtgcg 180
gCGgtgtgat tctgactaga caatttgtcc tgacagcggc tcattgcttc atgttcgtct 240
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ctgattatga cgtggctctt gttaaacttg catatccgct taagtttagc gaagacatcc 420
aaccgatcat gatggctgaa aaggactacg aaccaccagc aggaaccaag gcttatgtgt 480
ctggatggg cagaacatcg tcgggtggcaa ttgctaaaaa tcttagagga gttgatagaa 540
ataatagac 549

<210> 445

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 445

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attggaaaaa tgtgaaacct atcgagcaac ctgccatcat gagcaatttg cctgcatgga 120
gaaaaactgg agaacgtatt gctgggggtg aagaagctac accacaccag tccccattcc 180
aggctcgtgt tcttgttcac atggatgatg gcaaaagtgc attctgcgga ggttccttga 240
tttcccaaaa ctatgtgttg actgctgctc attgcgcga taaagcaaaa tctttcaccg 300
ttgttctcgg agtcacaaat gtaacgatg aaaacgaagc cggaactttg agagtagaga 360
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tgtaaagctg catcaccagt tcaattgaat gatcgtgtca attatctcga ttgccgaaaa 480
aagccaagcc acaccctttt gatattgacg cactgcttag gtggggaaga atggagatct 540
gtncacatt 549

<210> 446

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 446

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caaagatttg gaagtcaact ctgcggttgt tccatcatca attctgaatg ggttcttact 180
gctgctcatt gcatcagtgg cacttccgga ttogatgccg tagtaggaaa acacgatctt 240
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tatgctggag gCGtcaatcc ttatgacatc gctttgatcc aagttgccac accattcaag 360
ctgaacgaaa acgttaaagc tgtaaagctt caactaaaga tgaggctcac tcaggacaag 420
ttacattgtc tggatgggga tctacttcta cttcagcttc ccagctccct aataaactac 480
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549

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<210> 447
<211> 549
<212> DNA
<213> Ctenocephalides felis
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[illegible]

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<210> 448
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<212> DNA
<213> Ctenocephalides felis
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<400>	448										
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ggttggttag	tttgtggaca	aattttgcc	aaaccgggaa	tactactcca	tcaacaagca	180					
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gtaaaaatct	agaaaaataa	gttaatccaa	tgaaagaacg	tatacaattt	tgggaacgag	300					
ccaccaagaa	agattatttg	tcacgtttgt	aatggaatat	ttttaaggaa	aattacctat	360					
agaacaaata	ctactttatc	agtaaagtta	gtatttcaac	tattttaaacs	cttgcataac	420					
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<210> 449
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<212> DNA
<213> Ctenocephalides felis
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gtttttgctg ctgcagcaca cgcttacct acggcggaac caactacgac tgcagttcct 180
tgcacacctg gagaaaccaa acaagaggat tgcaatgaat gcattcgcaa agctgatggc 240
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acaggatatc aatgcactga aagagaatgc aaacatgacc cagaatcaaa agcagacgat 300
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actcctgatg gtaaaaaacta tatgtgcaca ttgatgatgt gtggacatca tcatgaaaag 420
agagaaactg aaattgaaga agtcaaagaa gtcaccattc aatcacttgc actacccatg 480
tctctggcca aaacaagatt ggattgnatc ttgcaatgcg cagggtnnga caggtctttg 540
accgccagc 549

<210> 450

<211> 154

<212> DNA

<213> Ctenocephalides felis

<400> 450

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<210> 451

<211> 215

<212> DNA

<213> Ctenocephalides felis

<400> 451

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atggaaaggc taggaatatt atacaagctg ctcatgataa taatgttaat gtgctttgct 180
tgcaggaagc atggacaatg ccttttgggt tttgt 215

<210> 452

<211> 160

<212> DNA

<213> Ctenocephalides felis

<400> 452

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acaaactagg tgcccaacct ggttgtccac caattacagc tttgaccttc ttgcgtccat 120
tacatgccat gtttangcaa agggctctcg aattgggggt 160

<210> 453

<211> 322

<212> DNA

<213> Ctenocephalides felis

<400> 453

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 gcggtcaagt agctcacgtt ccacatacca tagtcacacc tcatgcttgt ggatgogatg 120
 atagttttca gagacaagac tctggcagat catctatagg cgccagtgtg ggcccgtcag 180
 gacccgtaca gagtccatcg tcaattgact ggattcgcaa ccagcatcag gtaaatggga 240
 acgagcaaaa aattgatcct ccaccacctc cgccgttgcc agtaggagaa ttgcgctcca 300
 gacaagaatc accggaaccg gt 322

<210> 454

<211> 210

<212> DNA

<213> Ctenocephalides felis

<400> 454

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 cctatactat tttcgtcaca ataataatag ctttgacaat catttatatt tggataaaat 180
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<210> 455

<211> 464

<212> DNA

<213> Ctenocephalides felis

<400> 455

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 taccctctgc acacttttgc ttcgagcaac atttcgaata agccgctgaa gaacggaagc 180
 tgggtgcacca ccagtaacag caccaagctg gcaataaatt actgctgtga atcccgcgct 240
 tgggtgaagct cctaaagcgt ccaggtagaa tggatatcgt gccacgaat ctgagaatct 300
 gggttaaagtc aaaagtgcgc caggattcct attccatact agaccgatc gaacagggtt 360
 tcctggtaaa cgctcacgga ttatctataa taagtaatat aagttgtaat gattanttaa 420
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<210> 456

<211> 292

<212> DNA

<213> Ctenocephalides felis

<400> 456

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 aaaatatatt tcttcaagcc gatcgaaggg tggttacaat taaaaaatat atttctatta 180
 tatagtctaa gagaaaaata ctctcataac tcctgtgtat ggtcttcggc aaacggggca 240
 ttcttttact gacagcgaac actttatata ggacacgaca tggccacaag gt 292

<210> 457
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 457
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 actttatatt acaattttat gatgttactt catattataa acagacaata gtattagtta 180
 gcgaagtaag gctaccacgc cctttgttac aaatgtcatg gaatccctgt atagcaaagt 240
 tagtagctgc tactttanaa aatggcacat tgtggctcctg tgaatttggt aatgggctga 300
 aaataaattc aacaggaaaa tgatgtgcaa gctttatcat tatcatggag cccgaangga 360
 aaacanattg tcattgggac aaaatctggc acattatgcc aattcacacc agatttgaag 420
 ccgtnaaaac atcagtgtnt ccnatatnaa agntccataa ttctgttcat ggtgagcatt 480
 atcagtttga gctacatt 498

<210> 458
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 458
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 tcttggttaa caacaaatgg caaataaaaac attatgattg tccaaatggc ttgcactttg 180
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 ctaagtaagg cttaaaccag gaaaacaatc ttgaatagac taattaggat tcaaattacc 300
 ataaagtagt caattaatat aataaataca caaatgatct gtgcaattaa atataaaaaa 360
 tatgtataaa aattaaaatg tataaaattg tattttatgt aaggagcaca aacaaaatgt 420
 cattaactat agtaatttct gattatttaa aatatataaa tatagaagct ttataaaaaa 480
 aaanaaaan aaanaaaa 498

<210> 459
 <211> 267
 <212> DNA
 <213> Ctenocephalides felis

<400> 459
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 atcctccata cgttggatta cgtcaaagac cattttgccg tccgtctctc ttccattggt 120
 cccaaaacta atgccccaaat tgggcatggc ccgcagtatg gcaaccagtg attgaatggt 180
 attactgtaa acaactggtc gatattgttt gaagtcttcg cttgtgaaac ccgactcatg 240
 gataattttc atttggttta cgatagt 267

<210> 460
 <211> 351
 <212> DNA
 <213> Ctenocephalides felis

<400> 460
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 tgatgatgaa tggaataaac taatggatga ctccaaaact aacatcagtg ttgtgcagat 120
 gcaaaataat gaattgactc atttattacc gtttcctgca cttgatataa aagttttaga 180
 cttgagtcta aacagaattt taagaattga gccagcaact ttcaaaaatc tccaaaattt 240
 gacagagttg aacttaagta ataacagggt gacatcaaag tttttaattc catcagtttt 300
 tgagggtgat tattctccag atgcatatga gccattaaaa tcgatgaaag t 351

<210> 461
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 461
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 ttttagcgga gcggaagaaa tttgtggacc ttatgtctgg ggccgttatg atttacttgt 120
 tttacctcct tcattccctt atggtggaat ggaaaatcca tgcttgacat ttgtaacacc 180
 tactctattg gctggcgaca gatcgctagt gagtgttgtt gctcatgaaa tagcacatag 240
 ctggactgga aatttagtca caaattgcag ttttgaacat ttctggctaa atgaaggttt 300
 cactgtatth gtagaatata aaattcaggg aaaattgcat ggtgaagatg ttagagactt 360
 tcattcgctt tgcggactca caacattgaa agaagagggt caactattag gtgaaaccaa 420
 tcaactgact gctctcgttg ttaacttaca aaatttaagt cctgacgatg cattttcttc 480
 tataccttac atgaaaggct 500

<210> 462
 <211> 176
 <212> DNA
 <213> Ctenocephalides felis

<400> 462
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 aaacatgaag atgaggtaac tctggcagtg tgccctggca ttggtaactc ttcgagtgca 120
 gtctacattc gcacatttgt ccattacgca caatattacg gatacagatg tgccgt 176

<210> 463
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 463

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 tcacagaaag cttatcaaga tgcatttgag atcagcaagg ccaaaatgca gcctacacat 180
 cctattagat tgggtcttgc acttaacttt tccgtatttt attatgaaat actaaattca 240
 cctgataaag cgtgtcaact tgcgaaacag gcattcgatg atgcgatagc agagctogat 300
 accctaaatg aagattcata taaagattca actctcataa tgcaattgct gcgagataac 360
 ttaacactgt ggacatcaga cacgcagggt gatggagatg agcctcagga aggcggggac 420
 aactagtctt gaaaacctta cctatccact tccgtatcct taattcacc ttataacaatc 480
 ccttcgttat ttggtaat 498

<210> 464

<211> 246

<212> DNA

<213> Ctenocephalides felis

<400> 464

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 ttccttatac gggttgtata cacagtatga ctgatagatt ggaacatcaa ctttggcttt 120
 taggagcagt aggcctggga atgtgcgctt tgcccgtatt tggaatgata ttcaactgtt 180
 gccttttatat aaaattgaaa gattttattg acgattgaaa aaaattattt gaaattattt 240
 taacgt 246

<210> 465

<211> 477

<212> DNA

<213> Ctenocephalides felis

<400> 465

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 aatgttagat agacctgata catcgagta agtagcctgc gaaagcaaat gctgtaaggc 120
 gtgtccaaat ttgttgaata aaattgatac ctcttttaga gacagaagag aagggtatatt 180
 gccctcagga gggatttaga cttaaaatta atgatgctaa tgggtgtgta tocacaattt 240
 tacttttatt ggcatactc aacatccatc ctgaactctt ttggaatatc ttctcttctt 300
 ctctagtata aggatctaaa taaaatcagc cagtggcaat tcagctgcag aatcatgtat 360
 atcaaaaatac cttacatctt tatgccagn attcatattt gcctttcgat aatttttnata 420
 ccatcaactt ttnacacaac tggaatagcc ccgtcnaaaa ctttggaat nggaagn 477

<210> 466

<211> 395

<212> DNA

<213> Ctenocephalides felis

<400> 466

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 ctctgaacc aactttgcat gtgtaagagc cagcatcatc ttgttcagtt ttttcaataa 120

tgaattgatg ttcttccttt attaattggt aacggtcctt gagatcattg atttcttcta 180
 cttttttctc atctttaaac cactgatcaa caggaccatc tttcaatgga caggtttagaa 240
 ccaatggact acgaatatca aaaagttttt gcgacgtggc ttcaccttct ctggcataaa 300
 cactgctttg gacaaaaaat aataaaattg cactacacaa aaactgcttc atattttattg 360
 aattttcttc ccctogattg aaatagttca taagt 395

<210> 467

<211> 211

<212> DNA

<213> Ctenocephalides felis

<400> 467

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 aggtccgcaa ttatgacgta acggatcata tgcaaaattt gcggggcaat aatattgggt 120
 tcctatacta ttttcgtcac aataataata gctttgacaa tcatttatat ttggataaaa 180
 tctcgatggt gacggacatt tgaaaccttg t 211

<210> 468

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 468

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 tgtttcancn aattcttcan tagccgtctc caagaagacc cctcattcta taaacaactc 120
 tcattgattc tccttcgcat tgnncagcca accacacctt tttataaaact tctttcactg 180
 gaagatccaa actcatgatt ttgttgntga ccagtaattc cataccattg ncatcttcta 240
 ataattgctac taattcacia tcttgacaaa tnttattttt aacatctctc attaatggcc 300
 aagaccaggn tcattctgga atatggatta cccaacatgc gaccctgtaa aaagtcttct 360
 tgttgaggat ccttctcaag agataagaaa aattccccaa tatcattttc ttctggataa 420
 taattgagca aagcttttaa tataaatata ggagttcgac atcntcaatg gatattatta 480
 ctgnntccat gccccagaca 500

<210> 469

<211> 251

<212> DNA

<213> Ctenocephalides felis

<400> 469

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 tcggtaagct ccagaacacc tgatccctgc cgaatacgtg agcttcagtt agcgtttccg 180
 gtaacttttg gtgtaaagtt tccggcaaga acattccgga agtcgcgccc accatcatca 240
 ttacggaaag t 251

<210> 470
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 470
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 cagcaccctt ctctcccaac tcaattttct tegtataccc catgtaattg atatgattag 120
 ccctttctctc ttctctgaaa taaacccaat tatgtagacc tggtacttca caatttttta 180
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 taaattaaac caaatcgttt tcaataaatc cttatgagtt tggggatctc tagtcacaat 300
 tcccttttca ataaaaaaat tcataagatg tgcacatcagg ctggtggata acattgcac 360
 taacaaagca ttttcttcat ttctttcttg tgcagttaca tgttcattta ctgcagtatc 420
 taattcataa ttattaaata atgggtttcat aagcgctata gttttaatat caaaagctgc 480
 tgattcacia caagcaat 498

<210> 471
 <211> 105
 <212> DNA
 <213> Ctenocephalides felis

<400> 471
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 ggaccattta taatgcctgt tgtagacaag tataaagaca tgggt 105

<210> 472
 <211> 496
 <212> DNA
 <213> Ctenocephalides felis

<400> 472
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 tataaattta taataatatc aataacaaaa gttattttat agtagtcata atatactttg 120
 cattaatant tcatacacac acacacacat tacttgtctt ttcaattcca atttgttctt 180
 attctcgtcc ttgttcaa atgcgatgtt aatgttgtat taagcattct attgtgantt 240
 tagtattgga tttcttaaca ttaaagcagc ttctgatgat attattggca acgcattgac 300
 acaatgatan tttattaaat gtgaaatact ttcaaacatt ntatctctgg tgtcgaacca 360
 ctcttttagg atcaataagt aataaatgct tcttattaac tccttgaata ccagtcagca 420
 catattgcca ggacttgctc gtgactctng aactagaaaa tctncatnng ttttaccaaa 480
 ccctnagaac aactnt 496

<210> 473
 <211> 500
 <212> DNA

<213> Ctenocephalides felis

<400> 473

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aaataattca ggagccccgc aaagtcagan ttctatatga ctttgaagca gcagaagang 60
gaoganttga ccttcttagc tggtgaaata atccatatgc tagatgattc acatcctant 120
tgggtggaag gatataatca acatggagaa ggtttatttc ctgcaaactt tgtaactgct 180
gatttatcaa gttgaaccag aacantttag aattgatgct aacaagaaat ctgttcantt 240
ttctgatgct gttcangtca aaactatatc tcatgatgat gaaaccagtc ctgaaattaa 300
tgaagaaagt atagataactt tattaaattt attacatgaa gcaaactctg aanatcctaa 360
tgatgataca gagcaaagtc tcaacttaga ngttcangta aataaaatgg gccctctgat 420
tgatgctgaa ttaagaaaat attgacagga aacatgctca acttacgcaa ttgagtggcg 480
atttagtaga agcacttant 500
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<210> 474

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 474

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tacattttta cagatgcat taatgaaaat taaagtttgc tactaatcca catctatcct 120
tgattctgtt tttgctgcta atgtgccaca atgaaattta gatgctctca tttntntaaa 180
actaagtgtt aaatcatcca ttgtaattgg tcgtagagca tcatgaaatt cctcttctgc 240
gtcttgatg tgtggcacca aaggtgattc agngtgcata taatctctaa ctntatacac 300
agaagcattt cggcataatt cccttaagtc tgatcctgaa aatccctcag tgagtttaga 360
taattcatnt aaatcaactt catctgaaat aggttcattt tctaaaataa gctctagtat 420
cttgaatctt tgntgnctta tgggcatgcc aatatggaat gnggctggca tacnccgnaa 480
aaatgcttta tttnaatttn 500
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<210> 475

<211> 462

<212> DNA

<213> Ctenocephalides felis

<400> 475

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ttggtccaac tgtttggcat ttgtggatat attcaaaatc agccaatgct aatttttttt 60
nggtgttaca ttggcatttg ctacagcaca gattttttta gtcactgata tcttatttgc 120
ctatattaaa agagaatata ccttgaagag tggcttgaaa cgaatattga aaggcaaacc 180
tgcaaaatta gctttagaat aattttatta taatgtttga attgaaatgt ntttganttt 240
aaatatgant taagttttta ataaaagctt ttttattttt acattataat attatgccat 300
tagcctatat tgttacacag ttaaatttta angtatttta taaatgggtt tacaactaaa 360
caaatcacia acacacataa atataataa aactggatga aaatanttga atatatatat 420
aantcgtnaa gaangtcaac cttctggnat aatggagctt gt 462
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<210> 476

<211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 476
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 tatacggctc ttaaataaat aaaggTTTct taaaaatgcc gctaataatc atgacaggaa 120
 taccagtag tggaaaaact catogaacac tagaaataaa aaaatatttc gaggaagaaa 180
 gaaagaaaac agtacatgtg gtttctgaat ttgaagccgt cacaaaatca ggTTattcaa 240
 aaaatgatat ttatcttgat gcccaaaaag aaaaaatcgt tcggggcatt ctaaaatctg 300
 aagTTTTtcg attattgacg aaggataatg ttgttattct agatggagga aattatataa 360
 aaggatacag atacgaatta tattgtggga gcaaagctgc acgagttcct caatgcacaa 420
 tttggacatc tatactctaa gatgatgctt ggaagttcaa ccaaaattca ccttccatat 480
 caaaagaagt tttgtgagct ttgttttcg atgaagacct aatccaacaa atcgtgggga 540
 tctnctttt 549

<210> 477
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 477
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 cggTTTTaaa gctgccagac atgcagTTTT tacgaaaaac aatgggagact ccaaactcgtt 120
 gtccagccct tgtattaatc ctatcatcaa aaacaaacct tgggtgtatg gcaacgTTga 180
 gtacagtata agtggcactc cgctagaatc aaagaaatta gaagtagatt ggccaaaatg 240
 ccgcaaatta ttagcagaca ccctgttacc tctagtcgac ccaaaaccta taggtttaga 300
 agtacaagat attgcagcgt tcagctatTT ctttgacagg gctaccgggg ctggactgat 360
 agatccatTT ttgggoggcg aaataacagt tggggaatTT gaaaaactg caaaagccgt 420
 ttgcaaaacc gcaaaccg accagccctt catgtgtttc gatctaacat tcatatcggc 480
 ttgctaaagg acggattcgg attaaaaact gaatcgaatt aaaatactaa aaaagatcgc 540
 accacaaat 549

<210> 478
 <211> 417
 <212> DNA
 <213> Ctenocephalides felis

<400> 478
 gttaagagct gtcaaattat tgtacaaata tttctaaatt aaatacgtat atataattta 60
 ataaataata ttttactact atgaaaagag ccgcaaaaaa ctttctacta gaccgtctgc 120
 acaaaaggcg cgtcatggcc tgcatgggca tcaccgtttt gggaacactc agtcttgat 180
 tccgagttta tcaatacttt actgatataa aacctgaaat acaaagaaaa caaatattgg 240
 caaagaacga gctgttaaaa gaaggagcct cggacatatc attatacgag agcaatatca 300
 cgtaaagga ataactccta ggatagtaga tataatttagt actgattact ccaaaaatgt 360
 atgttatata atgtaaataa gacttataat ttatttcaaa aaaaaaaaaa aaaaaa 417

<210> 479
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 479
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 gatattgaat cgtgggtacta cgatttagcc gaggcaaata aaaattctat tgtaaaccga 120
 gaatggaaac aaatgtacgg ttcattcaag acagagtttg gcttaaattc attgaacagt 180
 tcagagatgc acaggcttgt attgaatatg aaaaccaaca ataaacttgg aaaaaatat 240
 tttgaataca aagttaaacg tgctgacccg gaattaaaaa aaggctgtga taaaacctgt 300
 cttaaaaatc atttgtgcgc aatagttacc acagttgtat cagatctcat ccagtgcaca 360
 aatatcatca aatcatcatc aagcattctt cagcatttga atatatatgt cctaggagct 420
 attgtaattt ccaattattt attattataa agtcattttt gttaagttat tataaattag 480
 aataaatcat tatgtggaaa tatgtaacgc ttgaaaagct agacaaatca atattttaga 540
 aaaaaaaaaa 549

<210> 480
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 480
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 tttgcgtgtc tttacaatg gatgttgaaa acgtcgaaagc atctggaagt gttccaaatg 120
 ttgctggaga tgcattgtgg gattctatgg tcacggatgg gaacgaaacc cctgcaagtg 180
 ccactggcgc agcagggtta gcccaagaaa gagttaaagc taaagctaaa agaattgtac 240
 gacaaaatag tcgagaaaac gtggcctcag gagcgggtgt accacaacgt tcttgaaaaa 300
 acagccgcag acctagaaat ggtcatggga gagggctgcc caaaaaaggt ggcgcggggg 360
 gtaaaggagt ctggggatta ccaggctcag agctttttaga agagtatgaa gatataatg 420
 atccaaactt tgatactgaa tgtataagtc acaagatat agagttgaag gccgtattcc 480
 tgaagtttct gcagaagaat tcttgaaaaa ggctgaccgc tattcttgat tttgacatgg 540
 gatcccaag 549

<210> 481
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 481
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 tacgttttat aaatcagctt ctgaaacttt aatttcataa tgatttctgg cgattttcct 120
 gaggaccag aaaaggagct gcagagttta gaagatgatg ttgttcaaga aattctcaaa 180
 actggcactg atctgagaca atactcgaaa caaatagaaa aagaactgaa agatgtagaa 240

aataaatcta tacaggatta tattaaagaa agccaaaata tagctagctt gcacaatcaa 300
attggggcctt gogatgacat ccttgaaaga atggaagata tgttaatgag ttttcagagt 360
gttttaggta atatcagttc tgaaataacg tctctacaaa aaaaatctgt ttcaatgtcc 420
attcaattat caaataggca ggctgtcgag gagatctctc acagttatcg aagatatttc 480
tgtactcaaa gtctgtaccg gaattttgga taccagtagc tgagaaagat tataactcag 540
ttcaaatac 549

<210> 482

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 482

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tgagagagacc taaagcttgt ggggaatatc ctattagatt ttatgcaogt gattctggcc 180
ttctcaagtt tcgaatatat gcaggagctg ttgctaaaac accacctgca gccactagaa 240
gattggtagc ttttacattt catcctaattg aaccatttgc cattagtgtt cagaggacaa 300
attctgagta tattgtaaac ttcatgtca gacatgctag ctagttttta caaattattt 360
gcaaaagcta aaaaggttac atgatgtaat caattaggtg ggtgttgaga agatttgaag 420
gtaattttta ctcaaaacat atctttataa tgaaattgna atattaacat gcgcataatgt 480
tgtgatcaat ttaaagtggg atagatgatg tgcctttgng cagggatgna gttgattatt 540
atagatatc 549

<210> 483

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 483

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aataaatatg aaagcaattt tgataacatt gatagtcgcc gcggctgtgt attccgtaag 180
gcctgaggtt ttcctggaag aaaacttcgt agacgatacg tggacaaata catgggttta 240
tagtgaacac cctggcaaag aattcggcaa attcgtgcac actgccggaa agttctataa 300
cgatgccgaa gcagacaaag gtttgcaaac aagtcaagat gctaggttct acgctctatc 360
tcataagttc aaacctttct caaataaaga caagacatta gttgtcaatt ttctgttaaa 420
catgaacaaa acattgactg tggaggtggg acttgaaggt gtogattgaa gttgaatcaa 480
aaggacatgc atggtnaagt cctatgaaat atgtttggcc tgcatttggg ccaggaacta 540
aaaggtccgt 550

<210> 484

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 484

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ttaaagtccc tcgcactcac acgcacggca ccactatgtc tacggtcgac aaggaagaat 120
tggtgcaacg agccaaactg gcagagcagg ccgaaagata cgatgatatg gctgcggcga 180
tgaaggctgt tacggaaacc ggtgtggaat tatccaatga agaaaggaac cttttatctg 240
ttgcctataa aaatgtggtt ggggcgcggc gttcatcatg gcgtgttatt tcctccatcg 300
aacaaaaaac agaggggttc gaaagaaaac aacagatggc aaaggagtat cgggaaaaag 360
ttgaaaagga acttcgtgaa atttgttacg acgtactggg ccttcttgac aagtacctta 420
ttcctaaagc tagtaatgcc gaaagtaagg tttctatctt aagatgaagg gagatactac 480
aggatatctag ctgaagtagc aacaggagaa acccgtacan cgcgtagatg atcacagaag 540
ctatcaagat                                     550
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<210> 485

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 485

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gcgtcgggtg acacctggag cgtggccaga gagattgagg cagctagcac ggtagctgat 120
gaagaagatg cattttatgt gtgtgatatc ggggatatcg ttaagaagta tcaattgtgg 180
aaggagcata tgccgagagt gcgaccattt tatgcogtga aatgcaatga cagtccgatt 240
gtattggacg tactggccgc actcggaacc gggttcgatt gtgcgtccaa ggttgaaatt 300
aataaggtgc tgccaatggg tgtcaaacca gaggacatcg tgtttgcaaa cccttccaag 360
ccggcgagtc acatcaggca tgctgctcga cgggggtggc gaagatgacc tttgacaacg 420
aatacgaact tcataagatc aagagatttt acccaaagtc cagattgatt attcgcattc 480
gtgtgattct gaaattgcc aatgccactc gaatgaaatt ggctgcgatg cattcaatga 540
accccgcgct                                     550
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<210> 486

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 486

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atcgcgaaata aataaatgtg gcgatacatt aaatcttcat tattagtga caaggaactg 60
atttaatatg gaagataagc ctgtgaagcc atgtaaagag aagcgaagga acaatgagaa 120
gcgtaaggaa aaatcccgga atgctgcacg ataccgcaga tcacgggaga ccgagatttt 180
cactgagctg gcggaatggt tgctcttgc taaagaggac acggaccatc ttgacaagac 240
ctcaataatg cgactgacaa totogtattt gcgaatccga gctgccgtac ctcaaattgt 300
tccagaagag gatatttgct caacctcatt atcgaataag gacaatgaaa acttcttatt 360
acaggcgctt ggaggatttt tgatcatgat ctacactgaa aacgatatcg tatacgtatc 420
aagcaatgtc aacgaatatc ttggaattac tcagatcgat ttaatgggtc aaagatgttc 480
gactcagtc tcttgtgat cataatgaat taaagaaccc ttccccaact caaccacaaa 540
agatgntac                                     549
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<210> 487
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 487
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 ttttaatctgt gtttgaagat caagtgatat aatttagaat aaagtagttt caattatagt 120
 atgtccacaa tgaatccaga atatgattac ttgtttaaac tgctcttgat tgggtgattca 180
 ggtgttggaa aatcttgtct actttttacgg ttgcggtatg atacttatac agaaagttat 240
 ataagcaciaa ttggtgtaga ttttaaaatt agaactatcg acttagatgg aaaaaccata 300
 aaattacaaa tttgggatac agcagggtcaa gaacggtttc gaactataac ttcacatcat 360
 tccgtggggc acatggaatc attgttgtat atgattgcac agatcaagag tctttcggaa 420
 atgttaagca atggctcgaa gaaattgatc gctatgcttg tgatagtgn aataaacttt 480
 gaggcaacca agagtgatta actccnaaaa agttgtagac tcactntgta agaattnctg 540
 ccagntaga 549

<210> 488
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 488
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 gcnnttgaaa tagactactg caatcctcaa tcaagcaatc aacattogaa gncaactaaa 120
 gataataaca atgacggtac tactgntcca gacgaagatt ttttttgcgt cattatgaaa 180
 atacaaagtg gaaggatgga tgaccagcga gcaagtataa atataaaacg agtaatatag 240
 aactctactt taataattgt aataatattg tatatggatt attagattac ttttaatact 300
 agaataatttc caatttttta atatcatttt ttgtggatta catacataga atagtctggc 360
 tatcgattgg tactttgact atgaattgtt gtacctttga accgcaacaa tttctaatat 420
 aaaatgagta gaaggtttat tagcgacata atagtgcac tgctataata tagcatttaa 480
 atcaaacaaa ttaaaaatgt gatatttatta ataggtacta tcataaagtc acaaaagccc 540
 ttccggtac 549

<210> 489
 <211> 547
 <212> DNA
 <213> Ctenocephalides felis

<400> 489
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 cctaccccaa atctcggttc tgcgtgggtg tgccagacgc taaaattcgt atcttcgatt 120
 tgggtaagaa gaaggcaggc gtagaagatt ttccactatg tgtgcatctt gtatctgatg 180
 aatatgaaca attgagttct gaggcaactg aagcaggacg tatttgctgt aacaaatacc 240

tcgttaagaa ttgtggtaaa gatcaattcc acatcagaat gaggctgcat cctttccatg 300
 ttatccgcat caataaaatg ttatcgtgtg ccggagctga taggctcaa actggaatgc 360
 gtggtgcttt tggaaaacca caaggtactg ttgctagagt tcacatcggt caaccaatca 420
 tgtctgttcg ttccagtgc agatacaagg ccgctgttgt aaagctctgc gtcgtgctaa 480
 gttcaagtcc tgcagacaaa gactatgttt caagaatggg attactaatt tgacctgatg 540
 ttatana 547

<210> 490
 <211> 353
 <212> DNA
 <213> Ctenocephalides felis

<400> 490
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 aaaggttgca ttaaatatac aactagcagc agccagagtt tcaactgatg ttggcattaa 120
 agtaggagaa gccctcagga atgtagtga acttcgttta gatttgggaa aatgttcttc 180
 agacaatttg aataaatggg aatccagatt ggaagaaatt aatgatgttg tggaaaattg 240
 catcgtgtga aattgtaact tgaaataatt tttcttaact attagtttta tagatgaaca 300
 aatacataat ctaataaacc agcaagtga aaaaaaaaaa aaaaaaaaaa aaa 353

<210> 491
 <211> 373
 <212> DNA
 <213> Ctenocephalides felis

<400> 491
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 actatanctt gcataatctt tgcgtantgt tctcancana atcatagaca caagtcctac 120
 taaaantagt accancatan anctgttana tangctgaac caatgtatcc tatgttgaaa 180
 gaagttanga tccaantact tgtcaaacct attttcaanc ttgacattgc ngggtttcca 240
 tgtcacttcn naagtnaann tcanaacngc tccagtttta nngtagttct ttcttaacnan 300
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 tgtagacnta gtt 373

<210> 492
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 492
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 tataaagata tgagatttaa gaacaattga aaatttacta tatatacata ttacaaaaat 120
 tcaaataatt gttattcttt gtcaaatatc ttgttctttt tcatgattac gatcattgtc 180
 agctgggtca tgtttcacat gtgatgtgta tatatcatat cccaaggata ttgtattatc 240
 atataacact ctaaacctat gaggtaatat ataaaagttt atgatttggg ctggcggcca 300

aactacccat tcagcagcgt aaagcctcca agcctttttc ttaatttcct ctattaattc 360
atctttacta gttttttcta gtatagctaa tgtaataaag aacatagaaa tgcataattg 420
tgagcataca atttgatcta tcacaacttt tttcatgact attcctattg tgcgtcctgg 480
caatcgttta tctagata 498

<210> 493
<211> 308
<212> DNA
<213> Ctenocephalides felis

<400> 493
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gtgatcatga taagtgccga atatgctgac gtagatgtgt gccaagattt ggacgatgga 120
acttttcttg ctgattcaaa caattgccaa aatttcttca tttgtgatgg aggccgagct 180
tggaaaatgt attgtccagg atcactttta tggaaatgatc acgaaggaac atgtgattac 240
gcacaaaatg tagaatgtta ccaaccagaa taaaacattt taatatcaaa aaaaaaaaaa 300
aaaaaaaaa 308

<210> 494
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 494
ctattacaac taggttaatt tgtagtaag ttttgttata actgttattg atattaaata 60
tgtattatgt ttatatatgt aaacgaatta taatttttgc tctttgatta cttctactct 120
ggtgcattaa cttttattca actagattaa atttttgggt tacttcctat gcctcacatc 180
agtgtccttc atgtgatcag gagtatTTTT tcgatctgga ctttgatctg tatcactctc 240
ctccatttca gctttgttgc gtttcttttc ataaatgaga ataatcgcg ataaaattat 300
tacttcagca cagatcccaa aaatggccac aaagcagcta atttatcttg aactcgaacc 360
aaggntgtag aattaacagt aattccaatg ccttgattag tagcaatata tgtatattct 420
cctcgatcgc tttttcagcc aaatcaattt ccaagcagaa tttggttatt gcatgatcaa 480
caattgatcg acgntgatc 500

<210> 495
<211> 244
<212> DNA
<213> Ctenocephalides felis

<400> 495
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aaaagaattg ggatttgtgc atttcatgac ggtgcaatca gcttctgacg atttcttttt 120
acacatatgt ttagaatgat catatacata gttagggtggg cattcgaaaa cctgaccttt 180
accatctttg cagaataagt atcttgtgca gtctttcgga tctggctgat atcctacaac 240
cgcg 244

<210> 496
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 496
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 ccaataacaa acgcatttat ttcgacagac cttctctcaa gtttcaacac ttccaagggtg 120
 ttactgtata tacaccaaca tacatcttga atcagtctga agttgtttata atgtttgctt 180
 ccggagccgg agtagaagtt gtagaaaatc aaggatttat gactgctaga gtttattttac 240
 catggacatt tattaataaa actgctggtc tactcggaat ttggagttgg gatatggcag 300
 acgactttgt caaacctgat ggaacttttg tgcctgttaa tctcaacagt tttgaatctg 360
 ttcataaaga tttcgcacgt cactggatgc tggcggatcg tgnaaatgaa cacctcggag 420
 cngnactctt nacttcgnga atttggtcgc ncagccagtt attatgcaaa ttcctcattt 480
 taccaaactg ggttaaagaa 500

<210> 497
 <211> 411
 <212> DNA
 <213> Ctenocephalides felis

<400> 497
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 caattgtaga gactcaaatt ccgatgctcc attttgtgta gatgatatgt gctcatcaaa 120
 acctggggaa aactgtaaga cggcagaaac tacatgcgcg gntgnaggat atcagccaga 180
 atccgaaaga ctgcacaaga tacttattct gcaaagatgg taaagggtcag gttttcgaat 240
 gccacctaa ctatgtatat gatcattcta aaaatatgtg taaaaagaaa tcgcagaagc 300
 tgattgcacc gtcatgaaat gcacaaatcc aattctttta tacctatgca ccggcccatc 360
 aatttatgct tgggtgcaatg gcaaaatgga cccgatcggc cctggaatgg g 411

<210> 498
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 498
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 gggcatttcc atttcagttt ttgctaggca taatgctttt tcaaacattt caattgcacg 120
 ctcaagattc cctcgttgaa cctcaatagt tcctaaagtt tcatagccaa attcacattt 180
 gggatcaagt gaaatagctt cattaatcaa ttgaactgca gtatcaacat cacctgtcca 240
 ttgcaacctt agtaatcctt tatgaacata aacaatagca ttattaggct caatttcaat 300
 ggctttagag aaatatgaat ctgctttgga gtattgtctt tgatcacaaa gcacttgtgc 360
 atataaagna tagcactcta tacagagagg aaatttttta atggcattgn caaaggccca 420
 attatttctt ttgccttatt catgtcntaa cagcaaaagc atatcgatgg tcgtatatat 480

tttttgaca taagccat

498

<210> 499

<211> 598

<212> DNA

<213> Ctenocephalides felis

<400> 499

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aacttataac tggagatgcc ttactctatt ctatgtttcn agaanaatca gttcccgtga 120
cttgcccttt gaaaggacct ttcacattca catataatan gggacatggc gaatgtatga 180
atccagtatc gaacattgaa agttgcactg aagacagtgc acttatttta acataccagg 240
catgtccgga tggtcatgga actgaaagtg cantggaaga actggagtgt ctagcaacat 300
ggaatgaagg taatgctcga tacctgggtg gtaaaatgaa tcatcgacat gccataacca 360
gtgaagatcg atacagatgc tttgtttatg agaaaataac tggaattgga gataaagtaa 420
tggtatacaa attgcacaat catgagatgc tacttgcaat ggattgttta gtgctacaga 480
agggtcagga caatgacttt aanacaagct gctattcctg agcgggtgctg tttccgaatt 540
ggttanctgc tggaccatca cactggcaaa cagttgataa tcacaantta ctgggttca 598

<210> 500

<211> 462

<212> DNA

<213> Ctenocephalides felis

<400> 500

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tcatcgaca ttcccataga taaattaact tcttttggtt cttaaattta ttccttgcat 120
aattgctcac gacattgttt taaagtgaga aaatctgggt tgggtcctaa acttgatatca 180
tagccatatt ttccaatagt cattaaacca tcaacaagta gggttgggca attttctttc 240
acatatttgt atanagttgt tgcttcattt ggggtgaacac catgtttttc tatttcacca 300
cttgthannta tttgaatcat aactcntaat ttatcaccat gaattttatt agctgaatct 360
aattttgacc aancattctg cacactgtcg ggntaattta aatgagtga ttgtttcnac 420
cacnatatat cncagggtatg ttaacacott aanaatttta nt 462

<210> 501

<211> 216

<212> DNA

<213> Ctenocephalides felis

<400> 501

agactgaccc tgggcccagg cgtttgctta anttgtgacg ttaaagacga ccaaccacag 60
tgnacgaatg atgaaataag cccatccaca actgctccaa gttcaaactg gaatgaaagc 120
aatggaaaacc tcaccgaatc acaaccctta agccaaaata cttcaacaaa tactccatta 180
gaaacatcaa atacctcact agcagaaagc agcagt 216

<210> 502
 <211> 489
 <212> DNA
 <213> Ctenocephalides felis

<400> 502
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 caatcctata atgccaattt catcaaaggt attgtattcg taataaccag cccaagcact 120
 ttttaacttta attgcttcaa aacatggaac acgatgtgct aaatgtggcc aaacgttttg 180
 ttcaaaaataa tccatatcta catctaagtt atcgactggc gggtctttgt caggatctgg 240
 tgaacgacca cagatatatc tgccacctaa tccatctctt ctaaaatatg tatttggttg 300
 atcgattgtc agagggtgat ttaaacctgg aggcgaatga tgttgacact caaagctata 360
 cacatatctt tccacaggta aaggaattga cagcaatcct tctccagtag caattttagc 420
 taatctggca acatgaccag actgangtcc tgcagctatg acacatattg caaactttat 480
 tgggtataa 489

<210> 503
 <211> 425
 <212> DNA
 <213> Ctenocephalides felis

<400> 503
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 aaaagaattg ggatttgtgc atttcatgac ggtgcaatca gcttctgacg atttcttttt 120
 acacatattt ttagaatgat catatacata gttagggtgg cattcgaaaa cctgaccttt 180
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 accgcgcgat tagtttctgc cgtcttacag ttttccaaa ggttttgatg accacatatc 300
 atctacacaa aatggancat cggaatttga gtctctgcan ttgatngttg taattggggg 360
 ttcttgtcaa gcgcacanct tcaanntaga ccantcgtgn caaangttcc caactgctta 420
 ttatt 425

<210> 504
 <211> 203
 <212> DNA
 <213> Ctenocephalides felis

<400> 504
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 agtctctgaa ttctgtcagt gtggggccta atgttaagtc ggagtgcgtg caatttaaaa 120
 gaagacttag aattgcttgg gttgcacatg cattgttgat cacctgtttt gcaaagaata 180
 ttttatcgag tctaccatca tgt 203

<210> 505
 <211> 317

<212> DNA

<213> *Ctenocephalides felis*

<400> 505

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tcaggatggg taacatgtgc ttttttgaac ctaagagcca taggtctgat aaatctttcg 120
aattttggag gtttacgtgt aaagccttca ccaacaaaag taacttttgt aaccattctc 180
ttccacgctt tccttctgga ctttcctgat gataaaactt tgaatacttc agcatctgcc 240
tgagctctga cttttggata ngcacatccc attttccggc cttctcttta cgtttctgtt 300
tgatcatatt agagagt                                     317
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<210> 506

<211> 518

<212> DNA

<213> *Ctenocephalides felis*

<400> 506

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ctctaanaat cattgacgct ttttcntttc tttcactgcc tttgttttan atggttgtcc 60
tcggttcana aaagacgtaa ngacttctga catttctggc atatcagaca tctttgtgaa 120
actgctgagt tgctccatTT ccttttttagt ttcaggatca ttcacatatt tcggtaaaan 180
cataattaat aataatggca anaccatcat taatatcata tgattgaata ggaaatcagt 240
gattttccat tgttccctta cttgaaaata tctgaatttt cctaattgtc ttaattctaa 300
agggtatggc acttgatga cttgagatgt ttgtaagtga ttcactttgc gtgctcngaa 360
ttttccttta nagttaattt ctactctaac aggctcatac atataanttg ngttaactgc 420
atccaanacg tangatccag atgggacatt anttataaca aangtgccgt ctcnttcaaa 480
aaacctctgt atnancccc gttcaanant attttggT                                     518
```

<210> 507

<211> 373

<212> DNA

<213> *Ctenocephalides felis*

<400> 507

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ttttttanct aantgtatgt cagaaaatgt cactaaagca acacctgtga tgcttaaaca 60
aactgcaatt aatttgata tagtaaactc atctccgata ttacaaggga ataaagcagc 120
taaaacaagt gtgaataaac ttgacgttga agataaaaact gtaaccgtan cagcttctgt 180
ttgtgataat gccagctgaa atgtgtaatt agcagcaaac cacaataagc agaataacaa 240
agcaattttt gctattcttt gtgtgggcaa acgatttgcg gcccgccgtg cagcctcgct 300
tgcccttaaa cttgcgtggg aagataactc tgccaataat gcttctgttg ctcnattatc 360
acgcatttgc cgt                                     373
```

<210> 508

<211> 430

<212> DNA

<213> *Ctenocephalides felis*

<400> 508

```
gtattcaatg gtatgaattg cttggtgant gaaaatttca ctcatgggtt cttcttcgtg 60
ctctccatga gctgcttttg gcggtgcctt tgggtgcctct ggcataccgt tttcttggct 120
ggagacaacg tctgaagtca tttccattcc ttggttcaaa tcaccatttg atttagcana 180
atgaggaact tcatctttat ttttcttggg tgccatcana tatnatgggt tgcccaanga 240
gcatgagcgg natakagcag agcccaatta acacaaatat tttttgaatt tgctgttgtc 300
cttcanacat aaattcatcn caatgttctg ctggngatcc ttgcttgaat aacatcatgt 360
tnatgaatca gnatcaaaac tgatggtgng cagcatgggt canatctgat gtccgtacta 420
tttgcagagt                                         430
```

<210> 509

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 509

```
acactgtcag taatattgat aaaagtgggt agcaagacgg aaataatgtg cagcctactg 60
acattgcaga tgacttaaac tgtgttgatg tggatagtgt tgacactgaa acttactcga 120
aatgogacaa aaacattaaa cttattgata aacctactca gaagcaaatt gtagttttat 180
cagaaaatga ttttgatgac ggctgtccaa aatcgaatac taataataat aacgacccca 240
aagaaatttc ttctcatatt tgctaccttc aagatagcga ttttaatacc agatcagatt 300
taagtoggat catgactccg aaacatattt caacaccaga aataccaaag tctaacgcaa 360
ataattatgc gacttttagat cagagtttcc atttaggtca aaacgttcaa aatgogcaaa 420
ttaacaaaaa taaatacatt tatatcgatc ctaataaaat tgaacaagat tttaacagca 480
atttaaataa ttttaaca                                         498
```

<210> 510

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 510

```
tttttttttt tttttttttt ttttttttgt ttttagatggt tgnccctcggg tcaaaannga 60
cgtaatgact tctgacattt ctggcatatc agacatcttt gngaagctgc tgagttgctc 120
catttccttt ttagtttcag gatcattcat cattttcggg aaaacctga ttaataataa 180
tggaacacc atcattaaaa tcataggatt gaataggaaa tcagnaattt tccattggct 240
ccttacttga aaatatctga attttcctaa tgnctttaat cttaaagggt atggcacttg 300
tatgacttga gatgtttgta tgtgattcac tttgcgtgct ctgaattttc ctttagagnt 360
aattttctact ctaacaggct catacatata atttgagtta actgcttcca atacgtaaga 420
tccagatgga acattactta taacaaaggn gccgtcttct ttnaaaaacc ctctatataa 480
gcccccgttc accaatattt                                         500
```

<210> 511

<211> 208

<212> DNA

<213> Ctenocephalides felis

<400> 511

```
tttttttttt tttttttttt tcgctttata aacattaata tttttgaaaa atgatattta 60
cataaaatga tttctctcaa tgaaatttaa aaatttctta atcgttttta aaaaataaat 120
ttatgaatcc catttcttat actccattcc atctggngga cgaacctcaa ctttctcttt 180
gccacctcg ttccaatttg ngctaagt 208
```

<210> 512

<211> 355

<212> DNA

<213> Ctenocephalides felis

<400> 512

```
tcaatatggg tcaccttaat aacattatct caatatcact ttatgttcta ttttaagcagg 60
cctttaccaa atatttttagc tctgccactt gtcttattag cagttaacca ttggttgaat 120
agtaaagaaa aatattttat cattttattcg gcatctgcaa tattaatatt tcgggctgag 180
ttagctcttc tactgggatt atttctgcta tatgatctta ttcaaggaag agttcagatt 240
ttaagattaa ttaaaatatg cttgccaca gcagctattt taatcacatt gactgtatta 300
gttgattcat tattctgggg acgactagtg tggccggaag cagaagtttt gtggt 355
```

<210> 513

<211> 518

<212> DNA

<213> Ctenocephalides felis

<400> 513

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aatttttgga atactttgaa atatattcct aaatttaaatt ctttaacata tacataccac 60
tttattaatg gagttttatt tggcatgcta attcttccat taccttggtg attcattatg 120
tgttagattg ggcctgtat ttattaggac gaagaaaatt gaacatgcca ttccttctat 180
tattttttat ggcatttggt gtggtattgt cactaccatt tgggtgtatct gaagtttctc 240
ttgtgtcaga caaatgcaac aaagtgcac gacctccatc taaacgacta ggccccaac 300
ctgaagtgta tgcatttca ccagtatgcc ttgcagact gtcattagca tgtgatccat 360
ttgctgaaag gctgtttggt tgagacctat gccctgcac catttcatca tgagaaattg 420
tattccgatg ataatcaggg tttgttgatg ttctaattgg cacaggtgga ggcggtggtc 480
taacgctgac agtgacagta ttgaatact ggggtggt 518
```

<210> 514

<211> 382

<212> DNA

<213> Ctenocephalides felis

<400> 514

```
ttccggattt ttggtcaata ctttagctag acgttctgca ggaatgccgt atcttctcaa 60
```


gttgaattaa attgatctca cctgtaagct actgt

215

<210> 518

<211> 275

<212> DNA

<213> Ctenocephalides felis

<400> 518

agcaaaacgt ttccataact aggatatacct acttgaaaagt gatggctatt gttggtactt 60
attgcatttg gtccaaaaat ctcaggctta taatattggc ccacagaaga atatcctggc 120
ctgtactgag aaaatgcgta aggtggtgga tggtaatcac agttcgccca ttggacaatc 180
gagatggcca ccaaaaatat tacagctttc attttagtca cttggtgaaa tatcacgaat 240
tgaaatattt caaccttcgc aaaaggagct tgtga 275

<210> 519

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 519

agtattagca tcagcccgga caacaacgca gtaggatgtt agcaacatta ttcaaggatg 60
aaagggtgtca acatctacca gcatattcaa ttttgagaa aatgtattta gatcaaataa 120
ttcgagatc tgacttgcag gagtttgaag cgcttttaca gcctcatcaa aaggcatcta 180
ctntggatgg gtcatnaatt ctggatcgng ctgngtttgg acataatttg ntttctggca 240
gcaaattgta taataatata acttttgaag aggtaggatc tttanttgga atnttagntn 300
gcaaagnngn naaaattncc gccaatgnta ttaaaagggn gaatgnatgg ggcntnaatn 360
anattgntna cattggcctt gggcgogaac cccttaggcg aattttngga tattcantac 420
actgggggog gttgngntnt gtttttagggg ccaattcnct tatngngnnn gtttaaatac 480
tngcgggggt tacaannn 498

<210> 520

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 520

atattttgta tagtttcttt tgttgaatac ttcataata tattaatata atttaggttt 60
cctctcgcaa gttcctgtgt cgcagctttg agtagcttgg ttaaatactg ttccaatcgg 120
acattgatca ggaactggct ctcttttagg acgtaaacac gtgaagaact tccggcatgt 180
tgcgctcgttc ttgaaagcaa attttccacg tgctcgcat tgcccgacac aggtttcgct 240
ccttggggaa aactcggcgg gttcttcgca ttgcaatacg gttcctcttc cggccataca 300
tacgacgtac aatgatttat caccaatgta cggaagcacc ttaggctgtg caggacatgt 360
aactgtatag cattttgtgc ccagagccat aggtccgcaa ttatgacgta acggatcata 420
tgcaaaattt gcggggcaat aatattgggt tcctatacta ttttcgtcac aataataata 480
gctttgacaa tcatttat 498

[illegible]

<400>	521						
ataacaatan	tttgagacag	caaactgaat	cctgtatnga	ttttctttgt	ccttggtgca	60	
gtctgaattg	cggattatta	tattcgctac	tgaaacattt	gaaactgtgc	catgctagat	120	
ttacctttac	atatgtgcc	ttaacacaat	gtgctagaat	agatgtagct	ataaacgagt	180	
tgtatgatgg	ttcttatgtt	ggggcacctc	aagatttgct	aggcccttct	ggatttgc	240	
tttcagggaa	tggaccgact	cgaagaacta	ttgttacaca	tatattagtt	tgccgaccaa	300	
gaagaagtaa	accagttta	tcagaattct	tggaattgga	tgaaaatgaa	tgcgacagcc	360	
aaagacctta	cattacaggt	cacaatcgct	gtatcatcat	acaataacat	gcctaccgat	420	
tcagctaaag	aactagatgt	tgattcagaa	ngagaaaagt	atcctttgtg	gttaagnaaa	480	
agacaatgtg	atgatagacg					500	

```
<210> 522
<211> 312
<212> DNA
<213> Ctenocephalides felis
```

```
<400> 522
tngaaaactt ttttaggcc ncaannngag cggncgccgg gcagggacca ggatattcat 60
ccatagcagc tttcaagtat tcttcaagat ctttttcaa tggtgtattt tcaataatag 120
gcacacacaa ttcttcatca tatottaaat ttcttttttag tgaatagcta taaataccct 180
ttatcatttc taaatgagtg catttaaaaa cttttcagga cattttaatg taactaaaac 240
tgcagcagaa gaatgtgtat gtattacagc acccgcatta tggtttctgt atgcaagcat 300
aaataatggt gt 312
```

```
<210> 523
<211> 258
<212> DNA
<213> Ctenocephalides felis
```

```
<400> 523
atgaacgtat attatattga gtggcaataa ttttaattcat gcaaatcata atgataaatt 60
tgtaattggt tagtttcaag aaattgtaat attgtaattc atgtaaataa ttgattgcat 120
tccaaaatgt ttttattttt gtttttattt taatagtttt atttaaaatg ttgttggtgt 180
attatatatt cagtatttta aaaaataata aatttactcc cgttgctaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaa                                     258
```

<210> 524
<211> 204

<212> DNA

<213> Ctenocephalides felis

<400> 524

cagttaatga tctacaactt gttcaaaaag ccttaactga tggatcgaac gcggtgtggaa 60
gttcaatcga atccttccta aatgttattg aaactgaaga agcacctcca acctttaata 120
gaactaacia attcactcaa ggtttccaaa acttgataga tgcctacgga gttgctagtt 180
acagagaagt aaatccagct ctgt 204

<210> 525

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 525

tttttttttt ttttttttaa ttgataaatt ttatttaaaa cttgcaaaaa ttattttaaac 60
aatttacgca tagcacattt cgctcgtgca aatctcttcc tcgcattcca gacaagtttc 120
cttatcgcat ttgtaggtgt cgggtgcagcc tctcttcaact ttatctcogt caatatctaa 180
gtagcatttg cccatgcatt tgggtcttctg ctgcactttt tcagggtcgt caaggcaatt 240
ttcatcattt tcatcacaag aaacacattc gtgttttttg gcatcaccat tgcattcgtt 300
tttgtcacia gttgggcaac gttctgggtt tttctcgac atttttttca gattctggtt 360
cttgaacagg ttgctgggtc accctaattt tatggcatca ccttgtgcat ttaaaatact 420
caaacaagta tcttgnngct tgagacaaac ttccttgga tcatctttag cgttgcaaac 480
cctgcgattc ttgggaaaac 500

<210> 526

<211> 259

<212> DNA

<213> Ctenocephalides felis

<400> 526

cagcagctcc agcggctgca gcggctccag cagccgcaat tccgccagcg gcggttggtc 60
caccacggc gcccatgct ccaccacctg ctccgctacc agctcctccc gctccagcgc 120
ctgctcggc agcatttctc gcagaacggg cgagagtatc tccagccgcc tgttggggaa 180
tgaacgattg agcattactt ccgccatata ctgaagaacc atatgcggat cctactggag 240
gcacatatgc ggtgttagt 259

<210> 527

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 527

tgancgccc cagaaaaccg ttcgacgcga taatctgtta actggcggtg aattttacgg 60
tcaaaaagat tcaaggatat gtaatttttc taattgtgaa caaagtctaa gaagtaccaa 120

agttgaacat acaaggcgggt cttctaatat ttctcatatt tcgtttggag aaggttcttt 180
tatacatctt acaacttaca ataagcatag gggcccttgc ccagctgctt tattggaaac 240
taataaagca ccattttaa atacacgtca agtgaaggcg cataaatttt atgtgcctaa 300
agttgtcacg gaaaaatagg aagcctttta aatatcatto agaatttatt tacttatcaa 360
tgtcttccat tactgtatat acttatatat atatatatat atatatatat atatatatat 420
atatatatat atatatatnn natanaggtn acaaatatnn cgcnnatnng agagngcgcg 480
cgcnnatatt gtntcntacn cnnatatntt gngntatana ganntntata tatntggcac 540
nttatatgc 549

<210> 528

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 528

agataattgt aaccagttt ttgatgaatc attcgaatac ataatttctc aaggagaatt 60
gtcgacgacg caattggaag tgacggtagc tacgcagaaa ggatttttat cgggaggtag 120
tcctgtgatc ggtcaagtga ttttagatct gaacgattac gatttatctc aagcttcaac 180
ccattggctg gatctatgcc cagaatttaa gtcataaatg tggatcattg ctttogaatt 240
tcaatcaaaa catgcgtatg ctattaaatt aaatgtgtaa ttctaccttt aatttttgc 300
cctacagttt aaatttacgt ttgttatttt taggtataaa tatacgcttt attttgttat 360
tttataaatt atcaatattt aataatgctt ttatattaca aataatactt atgtgttgca 420
caaatttggg atatagatgt atatactgta ctaatattta ttttttcaac ataaatttct 480
tttgcagtgt ccttacattc tagatattca attatcttaa taagtcttaa tcttaaactt 540
attatgcgc 549

<210> 529

<211> 441

<212> DNA

<213> Ctenocephalides felis

<400> 529

cagttaaata ataaggagaa gatggattac aataaagcac aaccacttca ccagcaatca 60
caatttgggtg gaagacctca aactcaacaa ccaggaccac tcagagcgag tgcaatgcaa 120
tcaaaagcac tcctgcaagt tccattctca cctgcaaaca gttgtccaaa ttgtggtgtc 180
ggcttcgtca ctgacaatta ctctgtctgc gcggtctgcc taggagcatg ctgctttcct 240
ctgggacttc tgtgtctgtg ggaatgaagg agagatcctg cgtcaactgt ggagcagctt 300
ttaactagga tatagagaaa attatgattt aatgtctttg taactgtcat ttttattact 360
tgatttttaa tattagatca gatgtttcat tttatgaaat acaaaaaata tatattaaga 420
agaaaaaaaa aaaaaaaaaa a 441

<210> 530

<211> 549

<212> DNA

<213> Ctenocephalides felis

[illegible]

gttaaagaaa ataataaatc tccaaataga aataaatttg ccaccccaaa atctcctaga 300
aaaccaaagc aacgtttaac aaagactaat ttaggtaaaa caaattacga aataactgaa 360
aaaacagtag ataaagaaaa agtagaaact ataacgtctg atcaaaaagt tttgctgaat 420
aatagtataa actctgacaa acatcagcgc agcaacttta gttttgcaaa acaagtgtga 480
tggactctgt tcttttaaga cagtaggcaa gcttantatg ttaaccaat tcgtgcnaag 540
antgtgtgt 549

<210> 536
<211> 409
<212> DNA
<213> Ctenocephalides felis

<400> 536
cataatcata ctttggatct aaaactaact ctgtgttatt tagaactgta gactcattat 60
aattaatgct ccaaccactg ccgaaaatat ttatcgatat tgagaaaata tcattataaa 120
taaattccggg atacatggag aaaatgccca tcaacaacat aatatagcgt ccagaaaaaa 180
atatgttcca cgtgtcatca gttatgtttt tggctattaa ttttttctcg ttgatcacca 240
aaacagcggc aaatattaaa attataagac catgaccaat gtgccgaac atgactccga 300
ataaaaatgg gaaggatgat atgggtgtata gtgcagggtt tgcttctcta tagctggcta 360
tgccataaga attgatgaga ttctggaagc cctgagtga tttatttgt 409

<210> 537
<211> 166
<212> DNA
<213> Ctenocephalides felis

<400> 537
atagctgac ctgacatacg ttcagctgtt acgacaggac cagaaacggc gtatacatag 60
ccgaattttc cctctcgctc ttcacccgag attttattaa gttcttgagg cattttggct 120
cctttgggta tttgtogttt taaaacacac tctgatcctg ttcgaa 166

<210> 538
<211> 135
<212> DNA
<213> Ctenocephalides felis

<400> 538
tgantgcggg tgctctggag gaacaaaaaa cctactcact ttataagggc ttcatacatc 60
tcggcgctgg tttggccgta ggattttccg gcttgccggc gggttttgcg attggaatcg 120
ttggtgatgc tggag 135

<210> 539
<211> 79
<212> DNA

<213> Ctenocephalides felis

<400> 539

tgatgattat gaacaagtta aagctgtagc tgaatattat gctgagtatt ctgctttatt 60
cgaaggctct ggcgatggt 79

<210> 540

<211> 140

<212> DNA

<213> Ctenocephalides felis

<400> 540

gtaggggcac aaattccacg aagtttttgt catagaagtc atccaaagca cgcataatatt 60
tactgtatga aatcaaccaa ttgattgaan ggaaatgttt cctttgagct aatttcntat 120
ccaaacccca naacacttgt 140

<210> 541

<211> 462

<212> DNA

<213> Ctenocephalides felis

<400> 541

ttttgatgtc atataaatgc cancaattaa accaantaga ccaatagcag aaccaaagat 60
ttcaacaatg agaattttga caaatagtcg agaattggca gcatcagcaa gagctgctcc 120
agatccaaca ataccaacag cgataccgca gaataaattc acaagaccaa cagccaaacc 180
agctccaaaa agaacataac caccatcca atttgcttct ttatatcctg ctttttcaaa 240
aacagatttg totgtgtatt ccgctaacag tctgacaga acaattgctg taattaaacc 300
ataaatagca acagcttcac agaaaataac tgaaattaag ttttttggtt tgattctggg 360
cgctttcaca ccacctocta caatggatgt gcctgtggta tgaattccaa caagctgctc 420
caacanctga naatgctacg gntaaacaat tcctaaggga gc 462

<210> 542

<211> 396

<212> DNA

<213> Ctenocephalides felis

<400> 542

aattgggttg taaagcctcc ttgggcgga actgacaaga tcacacttga anttgccaag 60
ctcttgaaag acgatttcct acagcagaac agctactcat catatgatcg tttctgcccc 120
ttctataaaa cagttggtat gttacgtaac attattgctt tctatgatat ggcaaaatac 180
gcagttgaat ctactgcaca aagtgaaaac aagattacct ggaataccat tagagatgct 240
atgggcaata ttctatatca gttgtcctca atgaagttca aggaccacgt caaggatggt 300
gaggcaaaga tcaagagtga ttttgatcaa ttacatgagg atttacagca agcattccgc 360
aacttgnag attagattat tgtgaatata atatgt 396

<210> 543
 <211> 283
 <212> DNA
 <213> Ctenocephalides felis

<400> 543
 anacactttg tctttgttaa tttctgtttc tacgtagcgg agctttctct ccatctcatc 60
 acaacgcctg acttcgttga cgaatttacg ttgaaatgaa ttaacatcaa cattcaagtc 120
 tctaaattgg acggttccag cttctcccaa ttctgaaact gaagtgtgag cagcttcagg 180
 ctgaataaac atctggcata aagccatctc ctacttcga aacatagccc ccatgatgtg 240
 gcctattcaa caccgctcc ttgatacaaa ataagcgggt tgc 283

<210> 544
 <211> 346
 <212> DNA
 <213> Ctenocephalides felis

<400> 544
 gacatttttag aactttcaac aaagatatgt tcaacacaac aacagactat gtaaaaactg 60
 tatacatata taatggaata ttttttgtat cataattaaa ttgtaaatct catgatttac 120
 taagcggttg cattaacagt attagcagca gctccttttag tttcaactgg ttggtccttc 180
 tcgagttgct tgccaaggta ttccaatta tgaaccatta atttctggac tgccaacaaa 240
 gcttcataatc ttacatttgg ttctcatat gccataaatt gcataaccag ttgtttgcc 300
 ccaagctggt cgatgatatt tttgccacgt ggataatgcc tgacgt 346

<210> 545
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 545
 atgtaacctg ggaaaccacg acgtccgggt acttcttcac gggcagctga tacctcacgc 60
 aaagcttcag catatgagga catgtctgtt aagattacca acacgtgctt ttcacattgg 120
 taggccaaga attcagcagc tgtcaaagcc agacgtgggg taatgatacg ttcaatagtt 180
 ggatcattgg ccaagttcaa gaacaggcac acattctcca tggaaccatt ctctcgaaa 240
 tcttgtttga agaactctggc agtttccatg ttgacacca tagcggcgaa cacaatggca 300
 aagttatcct catggtcatc caaaactgat tttcctggga ttttaactaa acctgcttgc 360
 ctacagatct gggcagcaat ttcattgtgg ggcagaccag ctgcagagaa aataggaatc 420
 ttctgtccac gagcaatgga gttcatcaca tcaatagcag agataccagt ttggatattt 480
 cctcangata gatacgag 498

<210> 546
 <211> 393
 <212> DNA

<213> Ctenocephalides felis

<400> 546

tctccaatat caaagcaggc tacagacaga acaaggggat cacgagagct ttcaagtaag 60
nggatcaana tacgcaataa ctcataattc ttctcattga gacgtggggc attctctctc 120
cagaacttag cagatttggtg aacagggtgac cattccaatc tgccggactt gatttctgta 180
gcatattcat caaatgagct aagggtcttga atggaagctt gtaatttttc ggtcaaatat 240
tcaacatcag caacgatatc ctcatcatct gaacgtcttt gttccaggat ggataattgt 300
ttcaatacct tgctttgcac cattgcaatg caatgctcct tggccacctg ttgatcttcc 360
actttctcaa ttaaattcct ataaacagcc agt 393

<210> 547

<211> 649

<212> DNA

<213> Ctenocephalides felis

<400> 547

cgagtacaag gaatgttcca gottatggag cccaaagtat tattgaaggt ccgcaaagct 60
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gttaccaaag aagttgtcgc cactatcaat aggggaagcat ttttgccagt agaattgctgc 180
ggtggagttg aattgagtggt acttaattggc cgcattaagg tttcaaacac attggaatcc 240
cgtttggtgact tgattgctca acaattgatt ccagaaatcc gaactgcctt attcggaagc 300
aatgccaacc gttaaattcac agaactaaata ttcatatcaa attacatgat taggatgcaa 360
agtgaacctag attcgtatta gtaaaaagca tcaagatcaa aatgaatgca caatcagatt 420
cataatgagt gtttttgcac gatacacatt ttttcagaca atagttcata taattgatgc 480
ttccctttgc ttcatagtcc tatttcaaaa atgttaatag atgcacattc cgtagaagtt 540
atatagcatg ctataattga atgatgaata ttacatttga aaattttgaa tacttaattg 600
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<210> 548

<211> 360

<212> DNA

<213> Ctenocephalides felis

<400> 548

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cggtatcacc ctcaagtgaat acttccgtga tatgggttac aacgtatcta tgatggctga 120
tttcaattct cggtgggctg aagctttgag agaaatttca ggtcgtttgg ctgaaatgcc 180
tgccgattcc gggtatccag cgtacttggg agctagggtg gcctctttct acgaacgtgc 240
tggtcgtgta aaatgttttg gtaatcccg aacgtgaaggc tcagtatcaa ttgtaggagc 300
tgtatcaccg ccggttggtg acttctcaga tcccgctcact tcagctacat tgggtattgt 360

<210> 549

<211> 357

<212> DNA

<213> Ctenocephalides felis

<400> 549

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taattggctt aaattttaca tcttgnttgt tttaaacttt gttgncaacc atatcgacgt 120
tcagtttata gtagacatat ggatagtaat caagcttggc caaaacccan accaggaata 180
tcaacgttct cagaagcacc ggagctttgt agagcactgc tgtcaagtgt cpgtacaatt 240
gattgagcac atctcgtaat ctcttgatgc tcttcttaga tgggtgaagg caacttcagt 300
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<210> 550

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 550

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acccaaattc caattttgac tatgcccaac gatgatatta ctcaccctat tcttgatttg 120
actggttaca tcaactgaagg acagatctac gtagacagac aactgcacaa caggcaaata 180
taccacactg taaacgtatt gnettccttg tcacgtttga tgaaatntgc cattgggtgag 240
ggtttgacac gnagaganca ctctgatgtg tccaatcaat tgtatgcttg ctncgccttt 300
ggtaaggacg tgcaggctat gaaggctgtc gtangagagg aagctttgac acctgatgac 360
ttgttgnact tggaattctt gcgaaatttg agaagaactt tatctcacan ggtanttatg 420
agaaccgcac agantttgaa tctttggaca ttngctggca antggtggga tcttcccnag 480
gagatgttga agagaatacc 500

<210> 551

<211> 116

<212> DNA

<213> Ctenocephalides felis

<400> 551

ccatgtcagt ggccaaagtt ggttgataac ctacagcgga tggaatacga cccaacagag 60
cagatacttc agaaccggct tgagtgaac ggaaaatggt gtcaatgaaa agaagt 116

<210> 552

<211> 294

<212> DNA

<213> Ctenocephalides felis

<400> 552

caaaggctat caaaaaatgt cttttctaac aagtgtttac atatttgctt tgtatcgaat 60
actattttaa aaatatttat tatacatgca tcaatgatac atattttaa tttacaatac 120
ttaatacttt tagtaaggct actatgattt gttgaataat ttataataatt caaaatccat 180
tacaaataat aaatactgct aaacaattag caacatactg tatggataat acataaaatt 240

actcggagtt caaaaaaaaa aatnaaaaaa aaaaacaaaa aaataatcat gagt 294

<210> 553

<211> 436

<212> DNA

<213> Ctenocephalides felis

<400> 553

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ggtgntgncc atgggattga gccaaacaac atatactggc tcgattatgc tctatgtgat 120
attctgcgng ngggcactat tcacaattgc catcctagtt atgatggaag gcctttctgc 180
gtcttgacac cactgcgtct tcaactgggtg gagttcatga gtaagttcta ctctggtttg 240
ggttatttgn tccaaccott ctgcttcaaa actattttgg acgcgngnga taaggnaagca 300
gaataatcaa tttatctatt atttaaataa attaaaaaac aaattagtta taaagaaggt 360
ataaaaaagn aaaatattgg ntaaaaattg nttttaaaag nctgnaagng atttggata 420
acacttaatt ttagg 436

<210> 554

<211> 223

<212> DNA

<213> Ctenocephalides felis

<400> 554

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tttgcgggct tcatccaaaa cattcctcac atgatcttca cgaactttca ataccttcaa 120
tcgagcttgg ttgagcatgt tggatgattg aattttcttt tgcaattcaa cttgtttttc 180
cttctttctca tagtattcca taatctttag tcgctgttgc tgt 223

<210> 555

<211> 418

<212> DNA

<213> Ctenocephalides felis

<400> 555

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aaagatattg tattttaatt ttaatttata ttgatcacia attaataact cgttacattg 120
taataatact aaacaatcta tttaacaatta aaaacactcc tttcgcaaac ttttaattctc 180
cttcttgatg cgtgtggatg tcattctgta aataatggag tccctgccag ggtccattgt 240
ggagatcgag atacagatag caagtaacga gaagaaaaag gctactccga accataaaat 300
gatgttaaaa accaccgggt aggagtcgtt gtattcttta gctaggttga aatcgggttc 360
ttttggagca tcactgctt gccttgctta cgtgttaaga cgtcattaga gggtagt 418

<210> 556

<211> 289

<212> DNA

<213> *Ctenocephalides felis*

<400> 556

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cgtagccag accagtaact gagaaattac ccgcaaacca cccattgttn actgggcaac 60
gtgtnttgga ttctctgttc ccatgtgttc agggaggaac cactgccatc cctggagctt 120
tcggttggtg aaaaactgtt atttcacaag ctttgccaaa tactctaact ctgatgtcat 180
catttatgtt ggttgccgag aaagaggtaa tgaaatgtct gaagtacttc gtgatttccc 240
tgaattgagt gttgaaatcg acggcgtaac tgaatctatt atgaagcgt 289
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<210> 557

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 557

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aaaatggcta gccagactca gggaattcaa caacttcttg ccgctgagaa aagggtgct 120
gaaaaagtct ccgaggccag gaaacgcaaa gcacgcagac taaagcaagc taaggaagaa 180
gctcaagatg aaattgagaa atatcgtcag gaacgtgaga agcaattcaa agaatttgaa 240
gcaaagcata tgggctcacg ggaaggagtt gcggctagaa ttgatgctga cactcgtgtc 300
aaaatcgatc agatgaacaa agctgtatct gttcaaaagg atcccgtgat gtatgaaatt 360
ctgaagttgg tctatgacat caaacagaa ttacacaaaa attatcgcaa agaataattt 420
atattattca gagctccagt gaaaaataa tatatttaat aaagattgtt tatatccaca 480
tttttgctta tgtgaaaaaa tcttaataga tcaatctgat tttagaaatc tagaatttta 540
antagggtc 549
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<210> 558

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 558

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aaagaaccac atcaaaatga cagagtattg gctgatatct gcaccagggtg acaagacctg 120
ccagcagaca tgggagacga tgaacaatgt caccagcaaa caaaattcat tatctgtcaa 180
ctacaaaatt catataccag accttaaggt cggtagatta gatcagctcg taggtctgtc 240
tgatgatcta ggcaagctcg atgtattcgt tgagcagatc actcgtaagg tagcaacata 300
tcttggtgag gttcttgagg accaacgtga taaacttcac gagaatttaa tggcaacaaa 360
cagcgatctg catcttacat aactcgcttc cagtgggaca tggcaagtac ccaatcaagc 420
aatctcttcg taacatctca gatatcatca gcaagcaagt aggacagatc gatgccgctt 480
gaaaacaaa tctcagcgta cacaattgaa aggagtttgc agacttggag aagaacaaac 540
tggaanttgt 550
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<210> 559

<211> 371
<212> DNA
<213> Ctenocephalides felis

<400> 559
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gaatgagatt ttttgggtaa caattttcaa ttagagttat ttttactagg gataaatttt 120
gtggatggaa agtttgggtga gacaacaaaa tagcatggtc tgtaagggaataaatagtg 180
ttatcttata gtttctggga cagtatgagg aatagtgtaa gtatctaccc gaccatgtag 240
tttttctata ccaatttggt cgaataaagt tattagtgtt gtaaacggat acatccaaga 300
aattaagcct gttgttattt tgtagttcat gtgtgaaaat tatattattg ttaaaattat 360
tgaagagatc t 371

<210> 560
<211> 228
<212> DNA
<213> Ctenocephalides felis

<400> 560
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catcagntgg ttcattgaaa gggttgtttg ggtgcttgtc ggcttcgctg aagggttg 120
tgcttgtttc gggttctggt tcgtcgaaag gatttgctgg aacgtcttgc ttggcgtaac 180
tggtgtcccc gtagacttgt ttcgaagatt caccaattgt tttgacgt 228

<210> 561
<211> 269
<212> DNA
<213> Ctenocephalides felis

<400> 561
agatctacta atgcccgtt taccactgtc acagcaattc cgcaaaccag caaccacana 60
tataantatg atgctattgt taaatgntca ataatgcac aaattattcc acaaatnccg 120
catgagacca tcacgaatac aagaattgga agctttccca cagagttaat aatagcacct 180
attatgggaa atccaatcgc atatccagct tccaacatta aagaatgcat aaatgcctgt 240
tcttcattg tgtctttaca ctcggtcgt 269

<210> 562
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 562
aaaaatccaa cggatgtttc gtcatacaga cctatcagtt tgcttcctat aatttccaaa 60
atactggaaa anataatata caaaaaaatt aatcatgatt taccgacaga catctggatg 120
ccgtcacatc agttcggggt caggcataag cactcaacga ctcaacagat ccataggatt 180

gttgaaaata ttaaaaaaac atttgaacaa aaggaatatt gcagtggcat tttcttggac 240
 gttcgtcagg cctttgataa ggtctggcat cctgggctgt tatataaaat taaaaaacac 300
 tttccagtta aataacttcaa gttattaaaa tcttatttag aaaacagatc tttccagatt 360
 agagtgaacg ctgaactgtc agatttctgt aaaatagggt cagggtgtccc gcagggcagc 420
 atcctgggac cattattata tgnattatth accttagata tccaatacct tctaactcta 480
 ttatagctac attgcagacg 500

<210> 563

<211> 270

<212> DNA

<213> Ctenocephalides felis

<400> 563

anatctacta atgccgcgtt taccactgtc acagcaattc cgcaaaccag caaccacggg 60
 atataaatat gatgctattg ttaaattgtc aataaatgca caaattattc cacaaatccc 120
 gcatgagacc atcacgaata caagaattgg aagctttccc acagagttaa taatagcacc 180
 tattatggga aatccaatcg catatccagc ttccaacatt aaagaatgca taaatgcctg 240
 ttcttccatt gtgtctttac actcggctgt 270

<210> 564

<211> 210

<212> DNA

<213> Ctenocephalides felis

<400> 564

ttttnaagtg caacccaatc attagggaac cgctaacaga agttatnaca gtgacgttct 60
 acatcggaga atgggttagaa ttcaaaaaat aatcatgcaa cacggnctca ttattataac 120
 attcacataa aaaatattta aaatatgtaa actagcttgc atgtttattg taagccagtc 180
 tataatctat tattgnttgc actttactta 210

<210> 565

<211> 425

<212> DNA

<213> Ctenocephalides felis

<400> 565

ataagtcatt tgaaaataag catttctgta gtggtgtctt cctggatgtt cgacaagcat 60
 tcgataagggt ttggcaccca ggacttttat ataaaaataa agcatatctt ccttcaagga 120
 tttttcaagt aaaagtaaat caagtaacat ctgatttoca caaaataatg tcaggagtgc 180
 cacaaggtag tatttttgga cttttcttat atgttttata cacaaggac ctcccattac 240
 ttgaaaatct gacacttgct acattcgctg acgatattgc cataactaagt agtaatcaca 300
 gtgctgatca agcttcccga caaacgcaag aacatatcaa taaactacaa atgtggctta 360
 ctaaatggaa gatttgcata aatgaaacca aatcagttca tatcacattt accctgagag 420
 aggg 425

<210> 566
 <211> 328
 <212> DNA
 <213> Ctenocephalides felis

<400> 566
 gaaggatant ttatgtaaat taatggttga tattantttg gcnttttcaa gaaataatta 60
 tgtgngggca ctcttttgcg atattaaagg ggcatatgat aatgtcgttc caagtataat 120
 gttccaagaa ttaattaaaa taggattacc attccgattg gtgtcagcct taacatttaa 180
 tatatatgaa aggaatataa tagtgaagaa agataacaaa atanttggtg aaagagtagt 240
 gaataaagga ctaccacaag gaggtatact tagcccattha ttgtatgcta tatatgtaag 300
 agatatagat aatatttggg taagaggt 328

<210> 567
 <211> 284
 <212> DNA
 <213> Ctenocephalides felis

<400> 567
 tgaaaacgaa ataattgtta aaatgtctga catagaagaa cattatgcca taaaattggt 60
 aacaaacaat ttcaatcgag aaccttcaat agttacaaaa tgggtatatac ctgtatcggt 120
 cgcagggttg gcttttggtg gaacttgtgt ggctaatatg ctgactaaaa aaccaatgat 180
 gtcaggcatt cagaaacaca tccttctgac atctagtttt ggtggagttg gttatatcgc 240
 agataaatat cgtaaatgaat attatgcaga aagagatgct atgt 284

<210> 568
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 568
 accaatgtat aaccgttaga ctgcaacgcg gcgtttacgc gctttgatat ttcattctcta 60
 agcagctaac acaacgtaat tgctttgaaa aaagcatttc naaattttca aaaaaatatt 120
 tcaaattaaa aaagtcaatt tctctcactt ttcaaanttt tgnaaagctt tttnnnaaat 180
 tannctangg gncnnaagt nntnacaaat tngnccgnaa agcnagaagn cctgcacccn 240
 caanggcact gncnccgta aaaanngggg ggctcncana ataattncnn tnnnccccca 300
 gentnggnca ccnacgnnnc nngttnnnnc ntanntntcn ctcnncnac nnnntntcgt 360
 ncnnacnacg cnntannnc cncntcnncn nccccntnca ccnnntnncg cncgaccatn 420
 nctntnnnaa ngcccnatnn cccctntagn nngccgtntc tnacttgntn nncnncnttt 480
 cnntgancgt ntctcggnan 500

<210> 569
 <211> 358
 <212> DNA

<213> Ctenocephalides felis

<400> 569

acaattgtgt agtgcagtgg ctaactgtat tagatgatat agtcaattta aaattcagga 60
actaaactta aattagtatt acgttgctgt cttcacatta tgttctatgc tcatcagttt 120
taagttaaag ttggccacca ctcatatata gcaaatagat aatgactatt gcgaaagaag 180
tctagactat aaaaatacta atttatttat ttatgtagta tatttttagt attgtgagt 240
aaagacgttt aaaatacatc taattcaaaa tagtcaaaaat gattctaac acattttgta 300
tgttttaagt atgcaagcat gtttgcttga gatttggtta agaacctaat tgtttagt 358

<210> 570

<211> 368

<212> DNA

<213> Ctenocephalides felis

<400> 570

acgtaatagt ctacttctac taggtgttca ctcgtaaaaa tcacgaattg aactggcgga 60
ttaggaattg ccaaataatt tatattttac tcgtaacaaa tattttttta attgcaataa 120
aaaaaatctt gtaatttagg ctgtaaaact tcattgntta aatatagaat atgtaatatg 180
atnagttgan gttggnatat ctataaagtt ttttttngtt tnatgttnc aannatcaat 240
caangttngc ntttttctga ngtatttgaa nattttgata caantattaa aatattttga 300
tttttagttt ttttttgc atatngctga tcaaaatant ataattttt aanacantat 360
gctggttg 368

<210> 571

<211> 255

<212> DNA

<213> Ctenocephalides felis

<400> 571

acaatgtttt acatcattaa cattaatttg cattcatcac aatgaacaaa actgatcttt 60
cgttcaatca ataacgtaat ctagaacaat tgtaatgaat tacttttatt attataagaa 120
tccaaacatg tattattcct taaccatttt ctaaagatct atggcatatt taaacatatt 180
aatatatttt gatactattt attttcatta aaataagcaa aattggcata ttaaaacaat 240
ttaaatagtt ttagt 255

<210> 572

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 572

accactgtat ttcttgaagt caaaattaat atactcagaa atatcataaa aactgttggc 60
ttatttagta aattaatcaa aacgttggtg aatttatgat tgctttgttg tcgtatttgt 120
aaaggaata aattgaacag ttgaataccc aaaccatcaa ttgaattaaa agtagtatta 180

agcttaaaaag tcgatccctct gatagttcta ttccttgtga catagtagag actagacatg 240
gaagataaat taaaatactg gggattattht tttataaaga gaagtgtaat aagtaggaat 300
atgttaggaa cggtagaat attatacttc tgaaaaatat ttctacaact tgtcatagag 360
ttaagagaaa acatgattct tagtgctctt ttctgaagct tgaaaacata taatgaaaat 420
atcttctata atatgtatga aaatcaaato atattttgnt atattcatca tcaaactttc 480
tcatattttg cttctttttc 500

<210> 573

<211> 341

<212> DNA

<213> Ctenocephalides felis

<400> 573

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caagatgacg cgttcttaat taataaatga tttggacttc tattatthtat tataagttgg 120
taaactccttg aaggcaacac agcaatttga tgatatcggc ctccgcctat ttttctcaa 180
atgaataaca caaaaatcct atcgataatt aactaacaat agcacggact tataatacta 240
aaacgaatta tgatttagtt cacattatcc ttacggataa atgaagtgtt tgttacaact 300
tacaataaat gttgtaaaga gttgataaag ttacaaattg t 341

<210> 574

<211> 359

<212> DNA

<213> Ctenocephalides felis

<400> 574

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actgattatc tgcaaataac gtaaattaga aaacgcacaa gagaaaatgt ttatatgatt 120
ccgatattta ctactattht atthttcaca aagcatagaa ttagthttta tatgatgctt 180
gatcaataat ggtgtttgaa atthtaaaat taatatacga agctatthta tatcacgcaa 240
agaaactttg atgtttataa gacacctatg tttacacata catacacata tattgtaaat 300
attaatactt ctttataaaa tccatgcata tttgctttgt catattctta ttattctgt 359

<210> 575

<211> 353

<212> DNA

<213> Ctenocephalides felis

<400> 575

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taatgaataa ttaaaatgtt cgtthaaatt gatttaagcg taatggattt agtggatttg 120
tttgattttg atgctctact ctgtagtcgc ggctgggttcg gtctthttcg tctthttcgat 180
cttattggtc ttatctgtat tatcggctctt atccaccacc gattcgagct caagggcttht 240
gagttgaagt ggctthtttt ggatgtaata agataataaa tttacatcat tacggatttht 300
tccactthtct gggtagtaag atthctctctt gttgtaggcc ttgtcgctcg cgt 353

<210> 576
 <211> 399
 <212> DNA
 <213> Ctenocephalides felis

<400> 576
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 caaacagttt ttgagttggt tcaagtattt tgttttgata gtctagttca aaagatttta 120
 aacacatcgc ccagcaaaat atattgcgtt ttcttcgtaa aaatcaaatt tcgtacactt 180
 gactcaatac cacacacaaa tcatttttatt tttctgtctt cgaaaacaga tattaatagg 240
 caaatgttat gtttcagtaa tctctagtat tttttttcat tgacatgttt atatacagat 300
 tttaaatata ttgtgttttt tttacaatcc caacgtctct gttatgtctc tcagcactcg 360
 acaatttttg aacctatcga cggggtgtcg tagtgccgt 399

<210> 577
 <211> 1000
 <212> DNA
 <213> Ctenocephalides felis

<400> 577
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 ctttatacat gttttatatga aaagtaaata aacaaacctc atagaaattt gataaactga 180
 attgcaaagc tcaaattatt tatttcaagt atataagcga gctttagaat tttcgataga 240
 attaaaatta aaaaatctga tgattttcaa tattaataaan aaagaaaatt aaaaagaaag 300
 tggaattttg agatgaaaaa aacaatttat ttctcaaaaa actaatcgat tctaagcatt 360
 gtcaatgcaa gcaatatgtn tttttaaatc attggaattt agatgctgcy ttttcacaaa 420
 aactagattt tagcactttt tgctcttcac ctaccaaacy ggtggacctg cctatgcaaa 480
 aatctaaca aaacgtctcg accgtaatta aatattggaa tgattttaat tgatttcaaa 540
 tagattatta tgaatattgt aactttcatt attcatatatt agtagatgaa atgtaagtag 600
 cttataaaatt gaacgacggt ctttatacat gttttatatga aaagtaaata aacaaacctc 660
 atagaaattt gataaactga attgcaaagc tcaaattatt tatttcaagt atataagcga 720
 gctttagaat tttcgataga attaaaatta aaaaatctga tgattttcaa tattaataaan 780
 aaagaaaatt aaaaagaaag tggaattttg agatgaaaaa aacaatttat ttctcaaaaa 840
 actaatcgat tctaagcatt gtcaatgcaa gcaatatgtn tttttaaatc attggaattt 900
 agatgctgcy ttttcacaaa aactagattt tagcactttt tgctcttcac ctaccaaacy 960
 ggtggacctg cctatgcaaa aatctaaca aaacgtctcg 1000

<210> 578
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 578

atgaaacaat tttctaaatc atttttctat ttcattgttca agagaacaga cggacagacg 120
 aacagataga taaacaggtg gacacttaac acgttaatcg ccatgataat atcagaaaaa 180
 aattttacatg cactatggta actttattag ttgaaaatgt atcgaaaact ccatgtagca 240
 aagaaaaaaa gatattttga aaaattcctg cacattatatt ttttatgccca catatatatg 300
 actgatatat atgtcagaca taatttataa actagtcggn ttggtattta gccttgaggc 360
 aagttacatg aacttcccga tatgttttaa taatcaactt aatcaataaa aaataaatta 420
 atttatgagt cattaaaagt attccgagtg gatttattat acataattga aaacgaacga 480
 acactttgac tcnagagtatt 500

<210> 582

<211> 469

<212> DNA

<213> Ctenocephalides felis

<400> 582

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 attatcaaat cactctaccg acgccgacgt cattttgcta ttctcgggat tttagtgtgt 180
 cacaaaaacc agatgttgat aacaggttga ctgccgaccg tagtggttggt ccattagtgt 240
 ggaaatttat aaatatacat atgattcaga atatgagtaa cacttggtta tatttataac 300
 gaagtttatt cacagaaaaa tatagaattg aatttagaaa ataacttttg tatacgaagt 360
 gtaagttacg gtgggttcaaa gtagagagag ttttgccggt ttctcctttc caaacccggc 420
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<210> 583

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 583

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 nggattgagg ggtatntcna atttggncat tgattcccat tactatgtga tcagtcattt 120
 cgtaaattnt attttcctna ttnttcataa ccactatact gtgcgcgnt gtnatgancg 180
 nggcnatnat aacgaatttg ataaaacgna tncctaataa anatttgatt ttgtacacct 240
 aggtcgngan cangcnaaga cnaataatgc agatgnncat cacagnnggg ganngannaa 300
 angtggatgt aganggtca tntttggcct atagnagtc gtattacaat tcantggcng 360
 tnagtttaac aacgtcgtga ctgggaaaac cntggngata cccaactgaa ngacttgnag 420
 cacatncacc tttnnngnag gtngggtaat ntncgaagaa ggnntgnacn gatnggcctn 480
 ccaacagttg ngcannctga 500

<210> 584

<211> 500

<212> DNA

<213> Ctenocephalides felis

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	1500	500	500	3000
Health status	0.8	0.2	0	1
Employment status	0.7	0.5	0	1
Family size	3.2	1.2	1	6
Home ownership	0.9	0.1	0	1
Auto ownership	0.8	0.2	0	1
Life satisfaction	4.5	1.0	1	7
Health satisfaction	5.2	1.2	1	7
Income satisfaction	4.8	1.1	1	7
Employment satisfaction	4.6	1.0	1	7
Family satisfaction	4.7	1.1	1	7
Home satisfaction	5.1	1.0	1	7
Auto satisfaction	5.0	1.1	1	7
Overall life satisfaction	4.9	1.0	1	7

<210> 585

<212> DNA

<400> 585

<210> 586

<211> 500

<212> DNA

<400> 586

<210> 587

<211> 193

<212> DNA

<213> Ctenocephalides felis

<400> 587

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ggtaaaacttt cgacaaggaa tacattacca acaaaattat aaaagtcag aataaattaa 120
tatgnaaata ttatgataag gattatatac ttttganttc tttttgtaaa taaagattac 180
ggattttaa tct 193
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<210> 588

<211> 399

<212> DNA

<213> Ctenocephalides felis

<400> 588

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tatactgtat ttttaccatt tatttaccac cgagcaaagt tctctogaat ctgatctcct 180
cgactagcga caactaagtt attagtctta actgaataat aacacgttgc ctgatatgat 240
aatattataa atatatacta gctcccagtt aagcgcttat atctgtogct ttacaacact 300
ttacatatta tgcaaatacag gttcttcttt ctattgaagt tccagttgcc tgtaataagt 360
gcatccctat aatttcgatt gtctcaaaga tctcactgt 399
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<210> 589

<211> 238

<212> DNA

<213> Ctenocephalides felis

<400> 589

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aaacaattcc gagattaacg gggctcgacc cggcgaaatn ggtgcttgcg tatcgagcgc 60
aataaaaaaca ttatataaca caaacaatgc agattattcg gttaacgaaa ttataagtga 120
aaaaaagtca ttaggaaaca caaaaattaa acataaaaatc aaacctagca ttagcaaaaa 180
tgccgaaaaa aatattaaaa aaaatactga cattattcca gaaatgttaa aatctgggt 238
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<210> 590

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 590

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actcggtccg anacgctana tgccaagagc gaacgaaatt tcttactatg agcgggttgca 60
angctagttg natattttatt ataaaaactat aataaaatta taantcnatc ctttaaaaaat 120
atthttngata cgtaaattccg tatatattac ataaatatat ggtatnttat naagacgan 180
atgtttttacg tnancatttn tgggtaacaa actattantt ttaatactat nttaccattt 240
atatatttng ctatcttagt atttattgag tttngatant tcatatnant ntaatttnca 300
aatacaatgt gaaaaataag ctattacatt cttacangca attgaacgta gottatanna 360
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tcatatcatn atttatgtaa cnnactatta tggtgtnact aatttancac catanataat 420
 annnnnnngna taatgttnaa nacantcgaa ttgtcnangc nanantctag attgnatata 480
 agtatgattn tntgtgatat 500

<210> 591

<211> 427

<212> DNA

<213> Ctenocephalides felis

<400> 591

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 ccaatnaagn ttaatngnaa tatnctcgtc catcgaacgc tntttaataa tctngaagac 120
 aacgcgtgca cggnncttat taaatcgtct ataacgataa tnnatTTTTA tatatacatn 180
 catatatgta tactgtatat atncatatac agnaaaaccc cgatnagacg atctttnaan 240
 aggcgtggacn aaaaacgcat cttacggcag aaaatantat taaaattaca ttaattgnta 300
 aaacaatgaa aatattttca tttgcnagtt ttagttttatc anccattcac taaantagct 360
 gtaagnggaa ttctgcctta aggcacnatg ncttaattgc cttaaggcaa atngctggaa 420
 cttting 427

<210> 592

<211> 307

<212> DNA

<213> Ctenocephalides felis

<400> 592

antcgggtatt gccanctgnc cngngggtnn gatngacgnt gnntnctatg tgcgccggca 60
 ntncnogat catngctaca gaaacggatc gttaaatttt ttgcanacta ttgaagngca 120
 tgttttgnnt ctgatatnta cnatcanatt acantnneng gatgcggtat anttncangn 180
 nncgatnoga ngaaanctan ntgtcgaatg gcgntatgaa taaggcataa cancattcta 240
 ggtattagat aattaccaat aacttatccg ctagactaat atctaataa aatatatnng 300
 ttttcgt 307

<210> 593

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 593

ccanagnata ttatattggt aattncctat ggtacaaaca naanttaact aggtataaga 60
 taaattntca tttcaagaca tctgttactt taagtgtatt agcaagaatc tcaaattggt 120
 agctgttaat ttaaaaaaat ataaaagcgg cctttactaa aaatgtaaat gtgaaaaat 180
 tttcaaaaaat atnttttgaa tacattatgc ttaaaatcgg attaggattt tcagaaaaat 240
 attaactgac aactggaaac ttannntntt tatnntttca ntatntatag cagnatannt 300
 annnatntn cattctnnnc naatnntgnt tntntcntn tnnnnntnn attttntnc 360
 canntntnn gtcccnnaa ttntgcennn ntntntntn tttntnnnc acntnnnnnt 420

ncnnntntnt tcntttnnnc nnanttctnn ncatnttcct ttccnctnnc ntntnctnch 480
tacnaactnt nttnttnnna 500

<210> 594

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 594

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aaaaccctcc aggtacggaa cccatgggaa tgtaaacaaa atttatactt attgttaaaa 120
tctctctaaa atatctgata atttgatgtg catatgtcta atgatcattt ttgaccgcca 180
aatggcacat ttttttactt tttcctccat atctccaaag tcgttggacc tttccaaaat 240
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acgtctcgtt ctcttaaaaa ctgagttacc gttttcggca ctttttgccc cgtatcttcg 360
gaacggctag acctaccttt gccaaaaact aatcagcacg tcttcttata aatatgaatc 420
gaatgttttt taaattattc aaatcggttg attcgtgttc ccgaaatcgt cgacgaaaat 480
ttgnatccgn acatacatatc 500

<210> 595

<211> 204

<212> DNA

<213> Ctenocephalides felis

<400> 595

accatgtaaa tcgcataatt agaccaaatc acgtatccaa caaatctttc aaaataacta 60
aaaatttcga atcggataat agggttcaga taatatcgca tcgttaaate tcgccccgta 120
aatctaccaa cggtttgata tattcaagcg atcgtgtggg cggcatgtct ggtgggatat 180
ttactttcac gtctcgcgac gggt 204

<210> 596

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 596

actttgtttt tcttttaatt gatgcttgct catagaataa tgtaaattcc gggcaatctg 60
tagnggaaac caggaaatat aatccagcta aaacttgacc tttggtatca cgtgccagta 120
atgaacggaa gttgtatact aaattacgcc ttactgtcac atccactgca gtataataag 180
gtttatgcac atataactaga gataccacta gattttagt tgttcctcct tctttaatag 240
ttctgtgttg tcgttcacgc cattcaacat aatgagaaga ttgagtgtca taagcatagc 300
aatattcgcg tttgcttcca cctggccctt catcacattg tgtaaaccac cccgtatgtg 360
gatatttttc atcagccatt actgtcacta ctcttgcgac gtgatatact ggatcacaaa 420
ggactacacc ttttcttcca tttatgcaaa tacgaatagc accataacgt gttctttttc 480
taagcgccgc tggagccctg 500

<210> 597
 <211> 428
 <212> DNA
 <213> Ctenocephalides felis

<400> 597
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 cttggcgagg tgcgttaaaa cagtcgggtt atatggtagg cttgttgatg gacgaatcgc 120
 ttccggcgag ttggcatcgg aatagaggcc aattggagaa ttgaattgtt tatgcacaac 180
 cttgtttgct atgctatcac cagccactct gtgtaatact gaatcggcaa ccttttgctt 240
 cattaaaaact tcatgattta atgttgactg aacgggagcc ctcatggccg gattcgggtg 300
 gtggcgcgaga tagcaatcat tagcatttga gtcgcgcttc acctttgcac ctggtagcac 360
 caacgggggtc gttctgtatg gccaaagtgt tgcagaatca tccattttat ttccgtgatc 420
 cgtggtgt 428

<210> 598
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 598
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 cgccaaaaaa atatcataac tcatcaagtt gtgaaactaa agattttcca ttattacata 120
 ttacatacta tacatcataa tactgaacga agattattaa tcgaacgctt tatggagtct 180
 gatataattc tgtaatctag acgtataaga atctttccgc ttatcttgac ttattttattg 240
 tttgttaatg attatacgca gcacaattga tattttatca cactttccaa taacaaattt 300
 ttatgggtta tgtgattttg tataaaatgc tgctaattat aaaattattc gactgttatt 360
 acgtgttttg ttggactaaa ttctaagaaa attattaata tttattttaga tatatttggt 420
 tcgaattttt atttctaata taatgttgca ttctatttgn tacatttatt taaataaata 480
 atctgctttg naaaaaaaaa 500

<210> 599
 <211> 194
 <212> DNA
 <213> Ctenocephalides felis

<400> 599
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 cattaatgtg cacnnaaaac taatatttag atgggaagga ttggatttta tcttaaaaaac 120
 taaagaaatg tgtcaaaaacg tgcgcgttcc tctcggcgga acacgctagc cgaacacagt 180
 ctcgtcggaa ctgg 194

<210> 600

<211> 383
 <212> DNA
 <213> Ctenocephalides felis

<400> 600
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 tcatatttta tctataatatt atataatttt tttaatacat ttagttttat atagttttaca 180
 ttatatttct ttccataatt tttaatatct catgtaatat atgtaggaat attttgtaca 240
 aggtgttaat attcaaagtt gcataaggct ttttgagctt taaaagtaaa agcttcaaaa 300
 agtttggaac ttttcgtatt ttgatgtgaa aatcctaaat atcttttttt ttggttttatt 360
 gttcatagca aattatacac agt 383

<210> 601
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 601
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 gttaaaaaaa tcacttttta atatcagaag ttatagctaa aataatagca tttattatta 180
 ttaaaatatt aactaaattc gtcccaaaat attaaacaaa cacaaaaaat cacaatgtag 240
 taaacaatcc aattagatta gaatcaaatt agtatgaaac caattcgagt aaaatccata 300
 catagatggt atatagagcc attaagagta gaacataata attgtagtta aaatgcatag 360
 attgcctcat caaaaatcaa cattaaatgt tgtattttcg atgatttgaa atcaattgca 420
 ccacaaatta tctcaacaac aattcactta tacttatatt tatattgaca tatattcagg 480
 tactacatct tatcatttac 500

<210> 602
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 602
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 tttttcatcc aatttcttag cagtgcattt aactctgtaa ttttgacgta tatactcgcc 120
 atggattcga ttcaaaagtt acaaaaactgt acccaacttg gagcccctaa atttaccacc 180
 catcaacata togagagaat cgaatggacc ttatctaaaa gtaaccctta ggaatacaac 240
 ggtttatgga gcttccaact tcattgtcac ggatttataa tccgatctca atactggata 300
 tttccaattt aatttgactc ttccaaaact ggacgttgaa ggtgatttca aaatcaaatt 360
 aaacctgttg ctcataaact atagcgggtgc aggtcgaatt tacatcaaca tgactgatta 420
 ccacgccagg atgcaaatac atggctacaa gaaagttgtc gacggaatcg aatccttcaa 480
 gtcaaaccac togacatgaa 500

<210> 603
<211> 220
<212> DNA
<213> Ctenocephalides felis

<400> 603
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agacattgat tcttgaatta cactttcaac aataaggaca tccgcatcat ctctggcttg 120
tttagtagtt atatttgcag cctttaaatt ttccattagc atgttaatga gcctaatttt 180
attattttga ttcgataaaa ataattcttg ggaaactggt 220

<210> 604
<211> 465
<212> DNA
<213> Ctenocephalides felis

<400> 604
acgtaacctg ggaggcacac agaagcatct atttcgcggg caagaacgta acggctgttt 60
cgttgcacac taatacaccg cggttacatt tttgctacgt atctaaattg aataaaaaag 120
cgtgtaggtg tcttttatgt tacatactta tttgattaaa tttcctgcaa atatagaata 180
ttaataataa tttcggatca ttagtaattt tattaatat tatcatttac aatatacaaa 240
atctacatat tacatagtta acattagaaa actaaaattt gatagtccat aaaatgttag 300
cctataaata taattattta tttattcata atatgtatta tgtttaactc tcttggcaac 360
ttcagttaaa tcagacttgg caaagttaag ttttgcgta aatatgttca actcacttgc 420
atctgttaat gtatctaaaa tagaaccaaa catcttagaa cattg 465

<210> 605
<211> 231
<212> DNA
<213> Ctenocephalides felis

<400> 605
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gaaggaaaac tttaaaatag cgcgaatttc ggcgtaagt aactccatgt ttacacgtct 120
ataactgtta aacgcaatat ccaaactaat catgcatagc atcgttttgt aggttatgtc 180
aagaccttcc aaattatgta tagtattgcc agatacgagc tctgtagcgc t 231

<210> 606
<211> 186
<212> DNA
<213> Ctenocephalides felis

<400> 606
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atagttccgc gcgtcgaaat attcaaaatg cattgcttcc gttttaacga cggcattcga 120

aacattggct gagcctgtaa

500

<210> 610

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 610

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tgccagtttg naatccaagt tttacctgga tattatattt tactaaattc gaggaatgaa 420
ctatgaatga tttcataggt ggattaangg aagtaattct ttaattttat gaccatacat 480
tggaatggac caaaagncct 500

<210> 611

<211> 140

<212> DNA

<213> Ctenocephalides felis

<400> 611

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gtttgtgttg catccaatgt 140

<210> 612

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 612

actcgtgata tcgtgctaaa aaaatatata aaagtgttgc catatgtgga acttgaattc 60
ggtcgcggca ttcacgtag acacgaacag aatgaggtgt gaatctaaac tacattacac 120
ccatagatca gggcttctta aactatgggt tgcgacocca aatgggggtca tgtaaaaaaa 180
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aggacagaag ttaagaacc ctgccataga taaataagca caaatgtttc cttatctatg 480
cataaatgat aaaatcattg 500

<210> 613
<211> 146
<212> DNA
<213> Ctenocephalides felis

<400> 613
ggtcaattga atctgagctc cagtgccttag caaagatcag tgttacgtat aaggtaattt 60
tacataatgg catctttgaa gttaaatata gtaaccagga gcttaagctc atctgcagtc 120
gcgtctcaaa tgggttaaacc acccgt 146

<210> 614
<211> 162
<212> DNA
<213> Ctenocephalides felis

<400> 614
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agtattatac gacatcttat gcaatcttgt ataaaatcat taatatcatc tagttgtata 120
ttatttgatt gttgactagg ttgtaaaatg ttttggttcg gt 162

<210> 615
<211> 274
<212> DNA
<213> Ctenocephalides felis

<400> 615
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tttattttta taattaataa gatagatttt atgaataaaa taccatgggtg tttgtttcat 120
ttaaaattgc attgtgaaca tttaggcttt aataatgatt acgcttgaat tctgtattgg 180
gaaatttttg tgactcccat attgaataat ttagaaattt ttgataagtt cacaacaatt 240
tttgataagt tttattggaa tgataattta tgggt 274

<210> 616
<211> 266
<212> DNA
<213> Ctenocephalides felis

<400> 616
acatcttcga tggtaaatca ttattagcat tttggaaatt ttaaacaacat tatgcagaaa 60
atgtatagtt ctaagcattt ttttaagttt aattgtttta gtctaagttg aaagattaga 120
tttagacaac tccaatcatt tgtaaaaaaa cactgcttgt tttgaaaaac aaaatttatc 180
taaaaattga cattataaaa gattcctaaa aattaaagggt atattgccca taaaacaatc 240
ggacgttatt tccatatcat aaaagt 266

<210> 617
 <211> 173
 <212> DNA
 <213> Ctenocephalides felis

<400> 617
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 caagagtaga catacgtgcg aacattttatt aacacctaca caggtggaaa tgtaacagag 120
 gcattgtaat tttggaactg tttattattt ttaactaaat acgctaaatt ggt 173

<210> 618
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 618
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 aatagcaagt taattaaatg cgtgtgtgct ttcgacgttt agttaaatag tttacggcct 120
 cattctcgat attaattgaa ccaaatacgt tccagagaaa ccacgggtgga gcagttcaaaa 180
 tattcattga agtttggaag ttaaattcaa ccaattcagg ttagatagac tagatagcac 240
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 ttttaaaaac tttttgaaat gactcagatc tatagacgat atgaaatcct gtaatttata 360
 ttttaaaaatt acccggaacc cgggttaaat agaaaagcct tgggtcaaac ttgaccaata 420
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 catgaccctt tattatcact 500

<210> 619
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 619
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 ctaaattgtag atcgtaaagt tttttatttg naaacaggta tgtccataaa tattgttcgn 120
 atactgcatn nagaatatta ttaattatta aaatcacaaa atatattaca gaaaattata 180
 aaacttttat aaaaatacat atgactgggt taaattagta tgtgattcat cacacacttg 240
 attgtaaaat gttgataaaa aaatatgata agagattcaa tttaaaatgt aatagtaatc 300
 tgtaacagtt acaacaatat ttatatacag tataacaata acaattaaaa ttgatactcg 360
 tatctgcaca aaaagtttca attgttgaag aaataatcag catccaatct atgattaatt 420
 tttggttatt ttccaatatg tatggacgga aaaataatcc ttgaaatatc ttttggcatt 480
 cagttcatag ctcttcaact 500

<210> 620
 <211> 299
 <212> DNA

<213> Ctenocephalides felis

<400> 620

acatctatat ataagttctt atctatatatta aantaacgaa gagaaaagtg aaagaaatat 60
tttntccttt ctttcttctt ttattccact aacgtggacc gtgtcgtatc tgtaattatt 120
tctaacttta cgtcaatct tataattaag gtctgataat ttgccaaacta ttttataagg 180
ccggtgcaat ggatgttggt gttagtctga ttggccttat ctacgaactt cgggtgtccc 240
taacacccac tggcctacta taaaatttgg catttttctg gagctctcac gatattttg 299

<210> 621

<211> 491

<212> DNA

<213> Ctenocephalides felis

<400> 621

gaaatgtcat tgcaaatctt gatgataaaa aggcaggtag taacgataac atttttgggt 60
ttttatttta ttttgagtta caactacctt tatacctgat ttgtagagca gaaaaaatga 120
gcaaaaagtt caatgtatta ttgatcacat aaagcaataa tacaaatfff tccaattaaa 180
tgcaacgcac tagtaaatc attgaaatgc aattcctaatt gcattgcatg taaatagaca 240
actcactgct acaaacagtg cattaaattc tgttttaggc attagtffff gaaatccatt 300
ttcatttttag atcatttttg ctatgtgcag tattcggtcc ttaggatcta aggtaaaaat 360
ttaatataga tataaagtca ctgtaagaat gtcattttctg aacttttact agaccatgta 420
gaatataacg agttcatgct tttgaagatg tgaaatctta attatgttta aattattttc 480
ttctttttct c 491

<210> 622

<211> 121

<212> DNA

<213> Ctenocephalides felis

<400> 622

acatatataa gcaatatatt aaaagtagtc tatttaacaa actttaaaat attataatat 60
tgtaaaaacta aaaacatata taagaagaat tactaaagca aaattgtaat tagtaactag 120
t 121

<210> 623

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 623

acgctatata aatgatagtt ttcggcatac ttacaaatca ctcataaatt cttatgaagt 60
ctggacaaga aaattataaa attgaataaa agctctatat gcaaacaaat ggaaagatga 120
ataacgaaac acttagcgac aatgccagtt ggctcccaga ctttgatgaa ttagtaatta 180
tgaataaggc agttaggggc ttgctgtaac attttttttt aattcatata tcttcagatc 240

<400> 629
 accoctactaa gaatgtgaca gaatttttaa gtcgggacgt ttaatagttt tcgagatatg 60
 cgtggtcggtt tggctcgctgg ctctacgacc aatactaata tttaaacagg t 111

<210> 630
 <211> 103
 <212> DNA
 <213> Ctenocephalides felis

<400> 630
 acacatcaaa ttgatttcaa atttaatgat aattatattt atttcatcat tctaagaata 60
 aagacaagcc catgcatcac attattaaac aggtgctttt tgt 103

<210> 631
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 631
 actcacatct atctaaacat acatatatga tttgcagaaa ataacatttt caagtcatat 60
 atgacttggn tttgntcant accnttntaa ntttggnaat ggnocctanng gnnnannnca 120
 nggcttattt ataatgaatg taaatgcnc aacatgtgaa taatattaat aggattagta 180
 tgcacgaaaa aattaatanc aataaaaaag aaagttttgg atttttagatt gagaattaaa 240
 aattaatata ttagatgtaa tgattaaagt gcaaatgttt agctatattt taattgttaa 300
 cagtggaaatg tttattttgt attgaaatct gttattgcta atgtgataaa cattttttct 360
 gtgttatgca catcaatttt tggattact gtgttttaac tgtaaattat aatattgcaa 420
 aaatacatta gtatattttt tcatgaagtt actaaaaata attttatcat tttcaaaatt 480
 attgtgcgca tgtattttaag 500

<210> 632
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 632
 actaaatggt aattgtgcga gaatggtgga tgaatttata aagaaacata tgggattcat 60
 atngaattaa taaatgtaat gcaatgaaaa cattcgtatt aacaaattca ataagaaaca 120
 acacgaactt aatacttgta acatttgtca atgcgaatgg ttcttgcaaa aaagccaata 180
 caaaaaatgg caaatattat atatgtatcc ttgaattatt taattttttt caaacaattt 240
 tccaaaattc cnaaaagaga gaatgtataa ttcagggcag tagcttaatg ataaaacgat 300
 cgccggaagc atttttagctt actatgacat gactattatg aaaataaaat tgatataaaa 360
 tgtgaaacat ttgaactata aatattatat ttaataataa atttgntatt gntatatacna 420
 caaaannaaa nanntngctg tnanaaaaa aaaggttgaa cttggggcgg anaccgnta 480
 ggccgaattt tgganatttc 500

<210> 633
 <211> 392
 <212> DNA
 <213> Ctenocephalides felis

<400> 633
 acaatgtgat tcacggaagc caatTTTTtT tccaatcaca caagatgacc ttgaccttgt 60
 gcgtttgtgg tcacaattta gaacaaaaca catccaactc ttagcaaaat tacataaaca 120
 gtaaaatact ttaaataaat aattagccgt caaaactccc accaaatttt atacgtctgt 180
 ttttccgtgt ggaggatact ggcaatgaga actggtttca ctaaactcgg cgctcttcaa 240
 acatttcgaa aatcttaggg agaacaaaat tacaataat tagtcatatt acttacatta 300
 tttttattta catcgttttag tcatctactt tttttaatta tttatagtta gaattacaaa 360
 ttgatttcag acttaagctt ttcaaactgt gt 392

<210> 634
 <211> 413
 <212> DNA
 <213> Ctenocephalides felis

<400> 634
 actacattgg aaacagccag tgatataagc aataagcctc caccgccatt aaagctgcta 60
 atgaatccgt atggttaaagt tttagacata aatactgtgt ataaagaaac tggaaccgaa 120
 ccgctcagtc cggattttaac cttcaatatc gtcaatgctc tgaacgcgag caaaggcaga 180
 ggtgctgaat tgttcgctaa gcgcgcgaag aaatctgaga agtggatcgt agatgaaaca 240
 agaactactg aaaaaataat caacaaagaa aattctgttc agcagtattg gaaaccatca 300
 caaagtccgt tatgccagac taatcgattg ggttcttggg aaaaaccaa actgcaaagt 360
 aataacaaag agtgccttta tacttctccg attcaatact accaatcgtg cgt 413

<210> 635
 <211> 649
 <212> DNA
 <213> Ctenocephalides felis

<400> 635
 acatgagnaa aaagtgtggt tatatatatt ttttatattt aataaatgat atattcaaatt 60
 gcattntttt ttaattctct atcatattca aatgcgctta tgatacaagt gcaaaaatta 120
 catgcagttt tcataatcca aaagatttta taatcgtgta aatgtattta tagagattgc 180
 actactaggt gggcgcaata ataatgctct tactaaataa ttttaatacat atattagagg 240
 caccactcta gcottatgct aattgatttg atctatatc agaaatgata aaaattaatt 300
 cactgtagca gtattattca gttgttttaa ttagaatttt aatctaaatt gcaaaatttg 360
 tatatgaaat aaaagaatag gtaatacact agaatacaat gaaataaatg caatgaatta 420
 gatcacaaat cattgacttg nttttttata tttaaattcaa aagtttttat aaaacatttc 480
 attgaattaa atcaataaag aaagatagaa atccaaatat tacaagatac attattgata 540
 ttttataata atagtatgaa tcataactc atgtggcaca gccattatta acaattaaat 600
 taacaatatg aaatcctaa tattaaaact atatttaaga aagcacatt 649

<210> 636
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 636
 actcacatct atctaaacat acatatatga tttgcagaaa ataacatttt caagtcatat 60
 atgacttgan tttgctcatt accatataat tttgagattg gcctcatgtg atgagacgag 120
 gcttatttat aatgaatgta aatgcacaaa catgtgaata atattaatag gattagtatg 180
 cacgaaaaaa ttaataacaa taaaaaagaa agttttggat tttagattga gaattaaaaa 240
 ttaatatatt agatgtaatg attaaagtgc aaatgttttag ctatatttta attgntaaca 300
 gtggaatgtt tatttttgat tgaaatctgn tattgctaata gtgataaaca ttttttctgt 360
 gttatgcaca tcaatttttg gtattactgn gttttaactg naaattataa tattgcaaaa 420
 atcattagta tatttttttca tgaagttcct aaaataattt atcatttcaa aatatggggc 480
 catgtttaag ggaaaatgaa 500

<210> 637
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 637
 actgaattat atcttaatta aattttggta tatttcgtag aaatataatc gaggatcttt 60
 tcttcaagtn ccaaagata ctgttacgac aagcccctag tcgtcctatt taatttcaat 120
 ttttactcta attgtcgttt acaattgatt ttgagctgat tttccgtggc tttagacacg 180
 tttttccatg gtttggaac cttgttcgat tttttagttc ttttatattg aatcgtatga 240
 tcgttggtcc ttttaattttc tttttgaaac agtccttggtg tggtttgatt cactatttta 300
 ctttttaggct gcaactcatag tcagtaatta atatacacga ttgctgattt catataaaaag 360
 taatgtaatg taaaactaga aatttcataa ataatacaata ctaaaaaacta ggaacgaaat 420
 taaagtctgn cacttncitt tgcataatagt ctttctaaaa ntagaaactc aagaagttta 480
 actatgttgc aaagtttcag 500

<210> 638
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 638
 acanagctgn aattaatatt atattngtcg gagggcattt tcaatcnata tcctatagtc 60
 gaagtgtcga tgtgangagt ccgcatttat tattcagact tctccatttc ccgctttaac 120
 gtttcgatat aaaatcgggt atgatacctn ctaaatcttt tacggcctta ttttagcttt 180
 ttattgttcc gtgnnttgta tactgaaata atgatgaatg cgcgaatatt taatttacag 240
 tcttcaaagg atatctaaat gttgtcgttt tgnocntcgt ctgcctgtcc gtctattggg 300
 cttttgtgaa ttaacaataa ataaatatgt attataacag tttagactat cgtatggtag 360

caaattatatt tattcaacta attaaaaaaa caggcattat cgatttataa ttcttgaaaa 420
tctaaggtgt gataaanaaa actggtggtg tatggagagg agaccctatt ttntcaagta 480
aaaccgggac gataatttta 500

<210> 639
<211> 112
<212> DNA
<213> Ctenocephalides felis

<400> 639
aatttccata attataatac tataatttat ctttttgatc gotttatatg tgcaaataga 60
gcangccaag cgcgcatctt ngcagaattg cgaggaaggt attcggggcc ga 112

<210> 640
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 640
acgaacaaag ttttttcgta tcttttactg nttagctagt agagagcaat ctgngtgatt 60
gatcacttat tgaaatgcaa attacattta gattgcagca attattgaca atatttctat 120
attttcataa agaaaccata taaattataa tacattgnta aaatttcgta tggntctcca 180
gtcattcaat tctaataaca atcaccatth aggctaaaat cttgcatgtt ttctgccctc 240
gaacaaacgg ntattcacgg ncagcgtgtt tagatatagc agcagagccg catattcagt 300
tcagcaagcn ttcaagaata aaagaataaa ataattttta ttaaataatca actaatatat 360
aatcttttct cggcaatgaa tataaganat tattatttta ttctatacan tggattaaaa 420
aaaaaaaaac ataaatttat ttttattatt aatgctaaat tatttatcnt tcgtttattt 480
taataaanat aattgaanga 500

<210> 641
<211> 322
<212> DNA
<213> Ctenocephalides felis

<400> 641
nnnnnnnttta gccccgntgt gnttcggcgn cgccccggcg tocatattaaa acaaccggcg 60
ccgggttttt caactgaaag aaatgttttt ttaattcaat tatttataat taaatacaag 120
tgaataaaaa ttacatttaa gagtattatt attgcttaac aaaagagtat taaaaaagtc 180
tactgatcat aaatcaatag tataggaaaa gattggtaat atattggatg aaggtaaaat 240
acacaagaaa tcaataaaca aaaataaata ttgtgaaagt tatttacgcg tatataaatc 300
atctttttaac aagcatcatc gt 322

<210> 642
<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 642

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actccgcgaa tctattgtca aacatgcttt taataccttt tatcatttct gaagaatggt 60
gatcccaatt atcattatct aacctttcaa gataagattt gaagcttttg ttgccttctt 120
aaaaaatctt taagttctgc cattttaatt gtttttagaa ctcaagataa ctttaatttaa 180
ttttttgata gggaagcgca aaccgttaca aaattttacg tataacaggc gttatgcaat 240
atcagcggtt atatcagaat tttaaactat aatcaattga ttatttaaca attctaattt 300
aataatatta gaattggagt ctacacatc agtaacataa gttgngngt taataaatta 360
acaaatatat aaaccaataa ttagtaatgn ttataataac taatataata tttcataaca 420
attaataacc taaggattta cgaaattggc caaaaatctt agagcaagac caatttcaat 480
caataatatg gtcaggttta 500
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<210> 643

<211> 127

<212> DNA

<213> Ctenocephalides felis

<400> 643

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actaaaattg gttacaagtc gaagtccagt attataaaaa agttttttcc aaggaacata 60
caattcttta atgtatggca aacatattac accagaatga gtttctgagt caggtaaattc 120
gttatgt 127
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<210> 644

<211> 393

<212> DNA

<213> Ctenocephalides felis

<400> 644

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acaaaaaaat gtcccgggcg ttaaacttaa aaggcattgg tctctgaaac aaaatcttgc 60
ttgaataact aaatttttta atacaagaat taattattcg gaaaaagttt gagattgttt 120
taagcttaaa acacttgtga aaagttttat aaaggaaagt ttcatagttt tggagatatt 180
taattaattg tgcaaaaagg tcctgtgctt caaacttata aggaatagtt ttcttgaaca 240
aaaattagtt tgaataacta atttttttta tataaaattt aattgttggg aattgtggtg 300
tatgcaaacg ttttagattt ttttatgctt aaaacacttg tgaaaagttt tatgaagaaa 360
agttttatag ttttggaat attcaattaa ttg 393
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<210> 645

<211> 394

<212> DNA

<213> Ctenocephalides felis

<400> 645

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actttaactc aatgctatct atacagggtta caatattata tattaaccca tctgagtatt 60
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ggaaaaaaat taatactgct tattataatt tgtgataaag cacaaaattc ttaatttgct 120
 actgtattttt tacatatgct taaattataa ttttaattta ttttagcat ttgttggtaa 180
 cttttaattg tattctactg atatagattt ctatgtaagg aggtttaatg gtttttttac 240
 aattcatgtg tggatatttg agaatcaaga aagcttttct ctaatatattt atacctctaa 300
 actgaattga ttaactctat tttttcttaa tttttataac ctctgctcc tccgcgctgg 360
 gtgcgaggta ttgattgctt ggaccgcgcg aagt 394

<210> 646

<211> 435

<212> DNA

<213> Ctenocephalides felis

<400> 646

cgcgggctcc gatncnnaat gcacgaentn tanggcatgc gtgnaagtgc gctattaata 60
 atacagttac aaagattant gnaacntana antngccaan cggaangnnt acgttgtaat 120
 nanagggaac acgttttttc annctttnt ntggantaag atngttaaat tgccgattnt 180
 caacangnat nggnnnagta nnaaacnagg ctcaacggca aatgccntcc acctaaatta 240
 ttttgtgaac ccaanaaaaa ctatccatac ttnattantn tngacggtgt cgggtccatta 300
 aagcatgana nttnnccgca tntntntcgg tttttgacan nangngtggg ntgcaaacnc 360
 ngannnnang acanactnaa tncnagnatg agtgagtng cgtgagttag agcatncnaa 420
 anggatgcgc cgtn 435

<210> 647

<211> 492

<212> DNA

<213> Ctenocephalides felis

<400> 647

tcntacacta caaaaatgat ttttatattt aatgaaaata ctnatttata aaatatctct 60
 tcaataagct atagttataa caggcncnnt taataattat gaattgnntt gaaaatgatt 120
 tacaataaag ctatgtgaaa caagnntgtg tngtatataa catcatcgcg tnggncgggc 180
 ttttccttgt tactatattt ttaaaaattt aataaaatta gctttgtagc aaatgctact 240
 gtntgataat tgaattttca ngaatagtag gagttgtagc aggagtcttg ttagcttcac 300
 gccatgcttc atcaaaattc tgaatagaat tagaacnaga tgatgaaact tttgtcttaa 360
 cgttttcata ggctggccca ttttntntnt ngtgatttga aagantcaga atttctcatc 420
 tgcccatttt ggtgnaaacc cccgtatttc ccttacaaan aagagttttt cggggnagaa 480
 ttantactng gc 492

<210> 648

<211> 417

<212> DNA

<213> Ctenocephalides felis

<400> 648

acgccgttgg cgatttccgt gaaaatgttt gacaatgttt gttccagggt tggcttgaac 60

tcttgaaga atagtcttgc gttgtcgttc acagcctggc taagaattgt tccaaggggt 120
 tgatcgttgt taaagagacc ggataggcgt attttattgt tccccaaaat aattttcatg 180
 togattgggt tgacttggag gcattcgatt ccgcgacaac tttcttgtag ccatgtatgt 240
 gcatcctggc gtggtaatca gctgaaatag taatataaat aaattactat aaatacgcaa 300
 ttactagaaa tagtaatgta ataagttaac acgttcgcgg gtgtgaatgc tatagcattc 360
 atcgtatata acgattaaaa tatgatgatt ttaatactac caatataata tgaatgt 417

<210> 649

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 649

ttctaaaata atattgaata aaaaatagta gatacaatca gtggcttgta taatagggat 60
 agctataagt agtgaaaatg gaagtgccta ttagaaatac ttttacaaaa cgaattgtaa 120
 tgattcagta gcaacatatt aaaaaataaa attgtcaaaa tacttgcttc aaaattatgc 180
 tagtattctt ctcatgaact aacattagct taattttata attaactaaa atttttgaat 240
 atcctcacat tatcgcaaat ccttggtgac tacatcgtct tagcatatta cctagaaagc 300
 atttcacat caactgacaa atttattgga caattgatgc ctaacgtaat taccaatgtt 360
 tacatcaagt aagatgctaa taattaacgt tatctatgtg cacgtaaata atgaaacaat 420
 aaaatttcgt gagtttctta agcgtgcgtc cctcagaggt caaaaagtcg aaaagtcgta 480
 gggtcatgat caacgaacgc 500

<210> 650

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 650

acctactatc acagtttttt tttactaaca gtttagctat aagtaggatg gtgaaaactt 60
 tttaaatttt tacatcttac tagcgatttt gataatactg attcattggg tataaatctt 120
 caaagaaaatt cttagttttc tacgtatact caaacgtag tcaatacgta tatatccaaa 180
 ttttacaccc catttggtgcg atttgctgcg cataattata tttacttcgt atattgagca 240
 gttactaaaa ttgtatacta cgttttcctg aatattattg aacatgtgtt gaataaattt 300
 acaccttacc tttattgaaa atatttggtt gtcgatagta atacgtgggc tttttacaac 360
 aattttgatt gctgtcaatg tagttgaacc aacctttggg ttcaaaacaa aacctatcaa 420
 tttgttggtt ggattccttc gtaaaaatct gctacacata gacattgagc aaaaatcaga 480
 aaacccttt gtatccgnag 500

<210> 651

<211> 483

<212> DNA

<213> Ctenocephalides felis

<400> 651

acacctatta aggagcaggt ttcaatatta ctccaatga cctattgctt acacattggt 60
atataaacat cactaaatat ataccatcaa aacttctaca agctaaagca gtaaatacatt 120
aattaacatc tagaatatac aaataagttt tcataaaaatt ttccatttct gttctaaata 180
tatattttgt gcatcgcaat gaaaatacta agacgtatat attaataatta aaatatgtaa 240
taacttacaa ctgtcataaa gatagtgagt tataaatgaa aatatctcag atggtataga 300
taaatttcaa agtttttaaat taaaaacttt ttcgaaggta acgcgaagtg caaacgaaag 360
tttcaccata aatagtttta gttcatttta ccataactcg cgataatact aaatcgatga 420
aaggctgaat tattaaggtt atcagaacaa tgaactgtta gcacacatat gcacatgtat 480
atg 483

<210> 652

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 652

acctcatgag cagttgcatc aatcataagt cgttgctcgt agctcatcgc aagcaggtgc 60
ccgcaaatta tcgcatggtg attcttgagt ttctcgtaa ttctaaaatg taaaataatt 120
tacatgtaat atatacccaa tacaatatta catatgaaaa cttattatat atttcttcaa 180
ttcaattatt attattatat tcaatatatc tagcaaataa cgatcgccca tctcttcgcg 240
ttcagtgttg atgtcaaacc tgttcaaagg agattgaaa cacgttggtat ttaattgtgg 300
tagatatggt gttatcctct tttggtgoga atagtattat ttttgactag cttattgaat 360
aatgacccat aagtatgggt tnaaaaantc ttagcntttc catgtaatta ttttgaaaga 420
catattgaca aatcgttgca caaaganctc ccatttngtt atgaaattca gatgnnttag 480
ttttagaagg ggctatttat 500

<210> 653

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 653

acaatgtata ttgaataaga tgtgagcgat acctgnagg gatgtcgcat tgagaattta 60
ggtgtggaaa attgcaatag cattaaaata taccatttga attagatttt taaataatac 120
caaaacaaat cataaattaa attctttcgt agatattcat acataaatat tggctttcca 180
gaaagacaac tatgtagatt tcacattcac tccaaaatta atgagttatt atataacaaa 240
tttttaaata acttatatac aaacactatg cacaagtgtt gatgatatat gaccttaaaa 300
agtaattaaa tattgcgctt aaaaatcaaa ttacatata catttaccca ttctatctct 360
agaaaactag aacagatatt cttatgaaaa atttgctatt ttaaataatct caaaggtttg 420
gaccatcttc ataataaaat ccgtntctcg cgngacacgc tagcgatctg ggatttcata 480
cctgnggcgg tcggctgctt 500

<210> 654

<211> 330

<212> DNA

<213> Ctenocephalides felis

<400> 654

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nccgcancca aataaactcc ttttcataaa ttaatccntt atgttaacaa ttttttttaa 60
tattganaac aaccttttaa natogatgac cttaacatat taaagcctta cttaccgcaa 120
aatgaagatc aaattgtgga ttgtctttta ttttttacac attccaaact tttgtcaatg 180
acaatataat attaataatt ttcacttatt ttatgtcaca cttattatta ttattatgat 240
cgaaattaat ttttaatttaa taattaatat tcgttgtaac ctcatggaag tatcggtctt 300
aactacgcgg ctttgtaacg ataacaatgt 330
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<210> 655

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 655

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nttctagccc ttgggnntttt attcccctaa cggggccncg ggcnnngggac caaaatagan 60
cntaatatth ttaatacnng gntaaaagaa anggtaaaan tttgggaggn tttaaaatct 120
ctaacnaggg taaaccnnaa acnaaaaaaa taatttaatc attactctct ttaactttat 180
ccontggcctt tataataactt atagataaaa tagaaaatag tttaaatttt nctnaacaat 240
gaattcattg ntttagagac gctctttact gntctatcct acaaaatact atacnagccn 300
agtatttttg aatatgaatt ggatatttct aataaaagcta taaatacnta cngtattttt 360
gaattttaa ntttctttat ggtatcttcc ncagatattt ggtttccata tctacnaton 420
ccontgaggtt ttttctaatt tcatcaattc agaagacntt tctttttcaa ttttcattat 480
atttgccnch ggattttcaac 500
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<210> 656

<211> 73

<212> DNA

<213> Ctenocephalides felis

<400> 656

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atgaaatgat cgt 73
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<210> 657

<211> 425

<212> DNA

<213> Ctenocephalides felis

<400> 657

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acacccctga tattacaagt tgctaaccac tgtcataata ttagatttnt aacaagtcca 60
gactgaaatc ttagaaccct tgagcttttag ctgatattaa cggttcatat taacttttct 120
cagactattg cgtagtagct gacattacac attctctcac gaaatcataa acctacatcg 180
acaaatctca gcaagatcat attatcgaca ttccgcctag ttaacaattt tcaccaagtt 240
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tgcatgaata acattttgtt taatcggtta aattcattac tttgtccttt tcgttgcata 300
 gaattatcga gacaaatccc cactacgttt caaaggattt tagttttaat aattatgaaa 360
 taaatcagtc ttaatctgtc ggctcgccggg caaacacttc tctttcaata ccttcggggtt 420
 ccttg 425

<210> 658
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 658
 gatagatccn tttcatgac aacataataa tacaaaattt taactcaatt tcaccgaaat 60
 gcttaaaatg taaaaccttg cactcgtc gccaatataa tcttgaacga aatagaaaac 120
 gacgttgctc tttcaaatct tgcataatat tattcctaga acacttaata aaacaccgat 180
 ttaataagat ttttattgnc attattttgn tcattacatg attttcgta aatatatat 240
 ttttaggtatt tgcaaaaaaa cgacgaaaaa cgacgaaaaa cgccaaaaat atatgaatct 300
 ttagtagcca gtaacttgaa aagtatgaag ttttttgaa aaactataaa atccttattt 360
 ttaaaaaaat acgtaattaa acaattgaga agaaccgaa ttgntttcac ttttgaactt 420
 ggtgtagatg aacctaattc ctaatttcac gcnattcggg acacagtaaa aaattcagac 480
 acaaaacgct cggtactgcc 500

<210> 659
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 659
 acaacattgt tgtaaaataat atgttctoga tccaaaatac aatactgtag ggaaataata 60
 tgtgctcgaa tttaaagaaa tgtccgggct cgtgtaaaact acatatatga tgaataatat 120
 aatcatcaaa tactattggg tataaagaaa atgcattgaa tattccagag tataaataat 180
 aactacttta cgctcccggtg tgggctcgaa ccaccaacct ttcgggttaac agccgagcgc 240
 gctagccaat tgcgccacgg aggtctttat cgcttcttga taatagtatg aataaattat 300
 ttatagcatg aacaataatt ataattattg aacaataatg agtataaaca acaattattc 360
 ttatacccaa taaactacac taatctgtaa cccacggcgc aaccagtgcc caatacctgt 420
 catacatgc gctcgattca cttcacacac aaatagttaa catttacttc actcctataa 480
 actatacaaa ctatcaaagt 500

<210> 660
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 660
 ccttttagcga accgcgtcag aattttttcca ggattcctca atttgtttat aaaaatataa 60
 taaattttca agtatittcaa ttttatttgt aaaactacat ttttgatca ttattatcac 120

gagcaagtat tttgtgccgt ttagaaaaac agctggaagc acttaatgct tattgtgttc 180
atgtttctcat tactcaggaa tatgagaatt gagaaatggt tcatttgtaa gtccacactt 240
tttcattcat tagaaagctc tcgtcttgaa gtcgtttact caataattta catgtttatc 300
taaataaaga aatagtagaa acttaaatac aaattggaat aagagcatcg gtagaatata 360
gtataaacia caaagcaatt ttaaatacatt aaattacaaa ataatoctca gtttctctat 420
tgtcaaaggg atgtgaaata ttttgatgnt taattttcaa aatcttttat ttaattaatc 480
aaaatattat tccagcgact 500

<210> 661

<211> 412

<212> DNA

<213> Ctenocephalides felis

<400> 661

actttttgat atttatgtaa tgattattta ttcaccgatg ttaacagctc aacgtctgaa 60
cgaatactcc aattaaagggt tggatcagcg aattattatt acaaatgaag atactgagga 120
atgactggag atagctgcaa caaactatct atgtaaatac aagcagtaaa ttacctgcaa 180
cagttttaca caaagtattg tattacgtaa tagccggtgg tgattttctg tttcaaaaag 240
ttataacttt tcaagactgc cagtatgggc aagactactg tataaaaatta tcaacaaatt 300
atagaaatat ttacaataaa caagggttta aattttaaat tatataaata aataaatagt 360
ttgatactat ttaacaatat ggtaattat attgctcttc gaatgatatt tg 412

<210> 662

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 662

accatagtgg cgcttagact gtgcttagct tgggtaaatt tttaaaattt tgaatccaaa 60
attacataaa ttttttatgg aaaaataatt gtttatcttc aaaagcaatt gttttgtcaa 120
tacaagcaga aagtttagtc aaaattctag tagatacttt ataagaacaa aaattaggca 180
aaataatatt ttgatttttg gcaagtttca agtggtaaat agttacttaa tgcaattgac 240
tccattgtaa aaattggtga gggtaagtta tagtaatagc aaaaaaaagg agaatgaaat 300
atttcacatg tctttacatt gcaaagggtt ctgatcggtt taaaaaaaat gatgtatgaa 360
tgtgtgtgag aagtaatttt tctcattatg ttatatataa taaaaagtaa aaatcagaa 420
tttagggata aaagtagttt atgctgataa aaaatctata tgtaaaattt ttaggtatat 480
cgggccagta aaaggtgaga 500

<210> 663

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 663

ncatnaatta cttgagccac aatgtataaa tntttcacta ttaagatnta taacttntct 60

ttttcaaatac ntatittggg ataaantaac ttatcataaa ataaaataact gggtaaaaagt 120
 atggataaaa ntnatatcan caataaattt tcatgaatct atntaataaa atggnaaaca 180
 tcgntnttta ataaatgggc ttcaaatttg actngaataa atacttgnta ttgcttcta 240
 ggtaaaattn atattittaa tggacaaaat gttactataa tattcttnna tttatataac 300
 aagaaaaata attctaaaat caatttcttt gattcacctg ttattttcca ngcgcggt 360
 aaaganaaaa tagttacnga ataatanaaa tcaaaagtga accggactgt gtgcaaattt 420
 tatgatcgag atcttgaaca gagtntttgt aacacgcac tntggtttag tgccattgaa 480
 tantgttatg gtgggggtgc 500

<210> 664

<211> 295

<212> DNA

<213> *Ctenocephalides felis*

<400> 664

acttatgaca tatcatatta taagtttcta acaataatcc agtttacta atnaatattc 60
 cnggaactat gcttatgaaa aatgaattaa ataaaacatg aattgctaca tttattcaaa 120
 atttttgaag cattaacatt agtatacagc atagaatgct acaattagcc agatagtcag 180
 aaatcatttc aaaaattctc cgttcatggc tttgttaaca acaattattt taaacggatg 240
 ccagtttagat tgttttagaa taaaactttt gagagaaata taatataata atagt 295

<210> 665

<211> 310

<212> DNA

<213> *Ctenocephalides felis*

<400> 665

acttcaaaaa cgcgataaaa tagcggaag tctaattttc tagtttttat aattaattaa 60
 ttttcacagg cctataatat tttaatatta tgattttgtt tatcatctct atcaccatgc 120
 gacgtttcat aaattttgca gataagtata tctgaggttc tcttgtaag ttgtccgtgt 180
 tatttaaaac aagtatgatt taatttagca agaaccaaaa ttagataactt ttaaaaaaaa 240
 ttaaaaatgt aaaaaaata tttgcaaat tttcccata tactattcca cttaaaaatg 300
 cccctgttgt 310

<210> 666

<211> 365

<212> DNA

<213> *Ctenocephalides felis*

<400> 666

acaaaagcatc tacatatcgg agcctccagc aatattttcg cataatattt ttctgcgac 60
 gattttctgt caaacgctac tcataaatta tacogacaga acgaacgtag cgaacatgaa 120
 aaatatctgc gcaaaatctg cgagctataa ttcaaacttt aaatatagtc ccgctttcac 180
 aaacagaaga tcagatcaaa agcttcgata cggcgataaa tcggatatta taccgactca 240
 aaacgtcgag aatggagaaa ataatacgat gctgtcgaat ccggtaatag atttgatagc 300

aaagtataaa gttgtgtaat tacaaaccca taaatcattt tctccataaa tatcaaaatc 360
tcggt 365

<210> 667
<211> 385
<212> DNA
<213> Ctenocephalides felis

<400> 667
tggngtTTTT antgggactt ttnaaanccc cgccgngcag tacctttatt attatgcttt 60
ggttcacgtc gggataaaaa tgttttgaac aagacaaagt ataataaaa taagnataaa 120
atgttttgaa caaaactaaa ttaatatata ccatttctgg gaaccattgc agactgataa 180
gatatcaa at gctattgaaa cgatatgatt tcaagaatca aaacgctttc atctatcttt 240
tatatttggc tatatttgtc attttccatt tatacagtga aagccgacta ttttactaa 300
aaaaccgggtt ttggaattcc acaatttccg caaaaaaccg gttatcaaaa ccgggtttttg 360
aaaaccgaca aatcctactt acagt 385

<210> 668
<211> 160
<212> DNA
<213> Ctenocephalides felis

<400> 668
aggnntngng aaccctttna aancnagact tncctttaann ccccggnagt tacatggntc 60
aaggagncta gccgccatca gggaaagttn cagacatacc gtttatgtcg aacaaatgaa 120
agatggcgaa gngctgtca aactggaaat ttcanaatgt 160

<210> 669
<211> 320
<212> DNA
<213> Ctenocephalides felis

<400> 669
atattgcttc tacaaatgca atgaaaagtc aatttgtntt gaatgtcacg taaactaata 60
aaggaactta tagataaatt atagcgacac aataatattt ttatttcata cggtataata 120
tcatcattag tataaaattt tccgaaatac tcgcataaac tgctaataata atgaaaacaa 180
ctcacgtatt ccgcaagggt gtccaatgca tggatcgaca catttatatt gagaacacgc 240
taa atgggttg gggcattcac tatcgctaaa gcattcgccc tgaaacgaaa taaaaaattt 300
aatttaacat ttgactgagt 320

<210> 670
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 673

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actatgaaga atgnttctat ataatttact gnattgnagt taactatatt taaatgctaa 60
cgtgcattta tatgttaagn ttagatttat tattgntaat attatatcta aaatgattcc 120
tacatataaa ataaataaaa ctttctgttg ttaaaacttt agaaatgtag ttatttttaa 180
tgttacatta ttgaattaat acaagtttta tatacaatga aatatgtttt aaaattgtat 240
attgntcatt atattttcat gcgccagtaa tagttgctgc aattccttca ccacaattga 300
agttttcttg tagttgttgc agtttgttta ccattcatca cagtagacaa tcattccaaa 360
gtagattgnt aaccatttcc atgaagtaga aatcaccaag ttagacttgc aatgacatgg 420
cttaattctc ctctgacagt atacaaatct aactccatat gatttgttca ggaccaanga 480
cgcatttaac atgcctctc 500
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<210> 674

<211> 296

<212> DNA

<213> Ctenocephalides felis

<400> 674

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acaaatttta gaatgttta atcattaagt ttgaataaat taccttaaag atgaaaattt 60
agctaacatt gtaaaagcat gttttgttgt aatttttta ataacgtatt ttagatatac 120
ttttcgcttc ttaacaagcc aaattatgaa tgattctcat gtttagaaac aactaataaa 180
aaataaactc agtgcaaaca taaacattaa tatagacaga ttaagtagat atatcccttc 240
ataaattaat tgatgtcatt cattattcag ataacacccc tagtcaatag gtttgt 296
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<210> 675

<211> 461

<212> DNA

<213> Ctenocephalides felis

<400> 675

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cataataatc ttgcaaaagt aatatttgaa atgaactata ctacaaaacg aaacagcccc 60
cacttcctag aactaactcc atctgaaatc gacggaacat atcacttatc attgattagt 120
ttgttttatt atatttacia atatagacaa ttatttttgt atggaatgaa acgagtttac 180
acatacgaag caaacatgct gaatattaaa aaatatttta ttttaagttca ttttattaat 240
cttgctgatt ttgaagaaat gaatctctca cattcataat atgatttttc ataaataaca 300
acgaaataca tattgttgtt taataattat ttttaacctt agaaccacat ttagagttta 360
tttataattc ggcattctatg ttatgtcgaa attttaacac gcagaattta atgaaatcgt 420
aattaactgc tcgatgcctg acaatatcta gcgtctcaag t 461
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<210> 676

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 676

acttcccaaa agttgncagc gaaggatcct acaagggcga cagcagcttt ggagattacc 60
 aaatcaagag ccngngaatt ttcaacgtca ccatgtatga tgtgacagtc acttggaana 120
 tcgaaggagc aactgaagaa cgcgatggag aaacttacat gcgcatcaaa cacttccgtg 180
 tcagcccaaa agttggtgat atgaaaatct atgcaagtgg cttataccag atgaaggact 240
 caataacgca gccgntgcct tcatgaacca atactggcaa cctgccttcc aggcactttt 300
 accatacgca gaagaacacg gagaccaaata catgacaaaac tttgtcaacg aaatgttctt 360
 gagaatccca ttcaacaaat taatgccagn tgaataaagc caaaatttaa atatgtatat 420
 aaaaaacata tagtaaataa gcaaaaattat tttgatattt tttgnggatt ccaaccaacc 480
 aaattctatg taggttgat 500

<210> 677

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 677

acgtatacta tactctatac agctgtatgt gccacacacc aataatgtat caatatgata 60
 caaagaaccg atttgtaaca tttttgtagg gcctttccat gacgtcacgc acatgcattg 120
 aatgtttttt ttgttcattt agaatagtta ggaaggtagc caaaaactcg aatccaaata 180
 tttatacgta tccctttttt ttagtttgaa ttttgaattt gtatcaaatt gatactaggg 240
 acggatgcgg gttaaaccaa aaagatcgga ttagtgatag tttcaaattt agcatggaat 300
 cattcggaatt atttccctact attaaagacc ctacgagaat aactaactct tcctcatatt 360
 gtattgataa ttttttcaca aatataatcta cggtaaattc atgtgtaatt aataccggtc 420
 tttctgacca ttatggaatt togtctctct tgcctaatac tactaattct acttcccatg 480
 tgnatcgna tataaaagaa 500

<210> 678

<211> 475

<212> DNA

<213> Ctenocephalides felis

<400> 678

acactatgat cagctcaaaa aataacttga acgcatatga taaactaaac cgnactcaaa 60
 attttaatta attaattata gattattggg tagatcttta tctataattt aataaaatac 120
 aacttatatt tctgaaagca tagcactgaa taattatctg acaatgcgtt acccatgtag 180
 atattttact aatgggaaca atttaaatat ttttaatttc aaaattagta atgcaaatac 240
 ttgcatgttt tgtgtttatt ttttaatttc gggattaata atcctggcag ttatttagac 300
 aataatgctc aaaaaatata taaattacaa cttgtttcat ttttttttta aacacatctc 360
 tacataaatt aaatacgtaa aatataaatt acatattacg aatatatttt gtataaaacc 420
 gacaogccac tgatggcatg ntggtaattc atgacattaa aatgcacccc ggggn 475

<210> 679

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 679

acaaagntat taacataatt gggttaacaa ataattntaa atatgatnat taaacagngc 60
 agggngncag ntaaaattat gccaaagtga tggttaattc gagttcataa aatttaataa 120
 atgatgcngt catatttgaa gcatgtatga aataaaaaggc ctttagagta aatacaata 180
 tcaaactttc tatataggnn acaaaattga aattaaatat tcaaggaata ttttactcc 240
 tagtagatgc gtcattttta caaaataaaa aacattatta attaataacc ataataattt 300
 aaaccattat tctgatatcc taggntgcat tgcaatgtca aagctcttat cgctgatccc 360
 cgagaaagct ctttaatat catatgagct tgatttctcc ctttgcnntt tataagnaaa 420
 tttcaaagat ttgnttcgat attattaaca tttgcaatat ttatatgtga tcacaaatta 480
 gtgctaaagg tgaaattatt 500

<210> 680

<211> 475

<212> DNA

<213> Ctenocephalides felis

<400> 680

cagcatattt tatacgcaat gttacttaaa aaaatgttac atttttatat aagaagaaat 60
 naacattatt atttattagt ctgatttcat ttatcttaat acgatattcc tttaaaaaga 120
 aataattatt aatttttaatg acaaatcaag ataataatgtt gacacttggt tatacaagaa 180
 atcgacttaa gatgacatgt attttcaggg attatgagat ttaaaattta tatggttccg 240
 aaaaactcag actcaagaaa cattagtgtg aattgaagtg attgcaaaaa aattaaaatt 300
 gaaaatcttt gaattctgat attttgcat accttaggaa aaattgatgt atgtgtgtgt 360
 atgtttgtat gcatacgcg atacaactgt tcgttgacga ttgcgcagga tcaaccaatt 420
 ttaattggcg gcaaaaacga ttagacatgt gcacatcgag attttaataa tatgt 475

<210> 681

<211> 387

<212> DNA

<213> Ctenocephalides felis

<400> 681

acacaaaata tgacgagaca cgactttaat aaaaacatat tttgtgcaca ttttttatt 60
 caaagattta ttttgaagtc attgttaatg agagtaattg atagtgaaga ttttagcttc 120
 ttcataaaat cagataaaac cggtaaaatg aagtatcaag aattgaagaa atttttgtaa 180
 ttggcaaatt caaactatgc actcaaattt tgtattttaa aataaggcgg catcaaaatg 240
 taattaaaaa tttcataaat gtttgtaaca tgagtgcatt ttccacagaa tgtcccatat 300
 aaaacgggca tcacaaaaaa gacatgtaag acataactaa cataaaatac cnttttctat 360
 gagacatcct cataactctc aactcaa 387

<210> 682

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 682

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ncctattaat gttaaaagaa taataatnan gggtagagttt taccgatggg tggagaaaagt 60
gtataaatcg ttttngccga tggatttggt taataaaaag aaaactgcac cacctgccac 120
gtntttataa tanttctata atctgcaata aaaatcatct gccatgaaat atgctccaaa 180
ataaaaaacg agtatatcgt gaaaaaatat tttgaaagtt ataacaaatg cgttgcaactt 240
tctagtttga ttagttcatg taaaaaataa ttattcacgg catttcaata catgctccca 300
atatatttca aattattcac ccaaataaga aacacnctcg tgacaattgc caaaccattt 360
tagataaaat atgtaaatat atcaaatgat cattatatgt cttaacaaag tttataagtt 420
atcaataaat aagaatgant ttatattatt atatctataa ataagtagac gtgtntatcc 480
accaatgaat ttcaattatt 500
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<210> 683

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 683

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acttcccgtg acgtaattaa aaattcgagg aatattacat gttttcaagt agattattat 60
aaatactgta acttatatat gatcacggaa aagtaaataa acaaaattaa tcaatcgaat 120
ttaaatctga ggacattgta taatatttat aagaattata taaactgaag tgcgaattat 180
tttgaatatt cagaacaaaa tttggcaata aaaaaaatcc aaaatcattt gtttcgtcaa 240
cacaagcaga aagttttctg aatcattcaa atcggatgct tagttctctc aaaaactgcc 300
attttctgca catttagttt ggtatctaca aatcggtggt acctgtcttt gccaaaaact 360
aatttctttc tatttctatt ttctgcactc ttttctccgt atcaccgaaa cggtcggacc 420
gacttttgog aaaaactaat cagcacattt ccctatcaat aggaatcgaa tgttttttga 480
acaattcaaa ttggtgatcc 500
```

<210> 684

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 684

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taagtttagg gatttatttt gttaatgtca ggtagaagaa gatagatgta tgaaaggng 60
taaggcttga acaatatcaa aaaaattgta attngtattt ttcagacaat agctaactctg 120
tgaaaaaaca ttttttaact ttcccgtagt taatacgata gcattcagat tcattttttt 180
tcatcttctt catcagatta tttagaggga tggccagatg ccantttttt gagaccttta 240
ggtcttttagc tcacctttta caattaaatc tttatgactg tttttaantt ttttttctaa 300
attctcaaat caatcattaa taacttgcgt aaaatttatg tctcttacca aatactctct 360
aaaatactac tacaataatt tcatcttaaa aaagattgct tataaacttc gaaatttcag 420
atatatttta aagaactata tatataattg catatgttct gottacgctt tgagcaaata 480
actaacatca gtaatattaa 500
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<210> 685

<211> 343
 <212> DNA
 <213> Ctenocephalides felis

<400> 685
 caaaantgcy tctgagggac tgnntcttaa tttattcata atatcaaaat agttattnat 60
 ttgcaaattg ntggtaattc actcgcgttt gtttatttat aattatatct ggntttcttc 120
 tcgatttgct atttaacctn tagcagcctt ttgcactttt gctgntggta ataatttcct 180
 atccgtaaca acacaatggg aaactgggaa taatocgtcc ttaagcacac atacgcaatc 240
 actgtgcatt tcagttctac taatttgggc taccaaactg tttgatacta cactgatgaa 300
 gttcttggtt tgcttttggg ctttagcgtg ttggaagntc tgt 343

<210> 686
 <211> 436
 <212> DNA
 <213> Ctenocephalides felis

<400> 686
 acttcgtaat gctcaattgt aaccgggttt gtattccatg ttagcatagc acttgtgctt 60
 gtaacagact taattctaag atttatcacg tcagttttta tattaggctc acttgtcggt 120
 atattaattt cagcgtaatc tacaacatca ctttctatac gctcggcagt atgattccat 180
 aatcctatct catttttaat tctatagcta tttaaaatag ttttaggaat agatttagaa 240
 aaaatacgaa ttctgtaagt cttcaaaggg tgtaaattcg ataaagatat tttagtatca 300
 gtaaaatatt catcccttgg tttatataca gtattgcgtg cgcaatcgaa acattttatg 360
 ctataaacia taatttcato attcgggttt cttgaatctt ttgtagcatt agcatctttt 420
 ggttgtccat gtgagt 436

<210> 687
 <211> 403
 <212> DNA
 <213> Ctenocephalides felis

<400> 687
 accgttcagt gcgtttataa tgaatattat acagaagtag tattaagata gaattttttt 60
 ccgcggaccg gaataatata ttaaggtaag gcaaggcata atatttataa gatacacaag 120
 acattttgcc ttgaatatta atacatataa tataaagatc actatcaagg tgaggcata 180
 tattttattaa taacttatta ttattttaac gagtttttat gttttcgttt taggggtgta 240
 tagcgaact ttttcaagtt atcaagttaa taatataaca atattaaggt gaagcatatt 300
 aattatattt ataagataca aaataatttt tttacataat tatacttato ctaatttagc 360
 cttattaaat tttagttttt tattttttaga atatttcctt tgt 403

<210> 688
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 688

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acacatctat atagtaatta gatctataat tataaaatth actcaattaa ataattatgt 60
aaatgggtgca tattatcaag atataatagg tttaaattgt gctagagatt gtcggaatta 120
tactaattga aaagtcgatt actttttatt ttatccagg attaaaagta aagtttttcc 180
atagaatatt caaaaaactt ttgcctcaga ttacccttac aaaagacatt tgttaaacad 240
atatcgtttc ttccctaatt tatatatata tagatcgatt tataataatt aataaatgca 300
atattggatc gagaactaac agttatagaa tttttactaa gtttctgtta gtattttata 360
atgtatatatt cttataaatt caaactgata gtatctatta ttttaataaaa gttgaaaaag 420
tgactaatth gcattgtgtg tggcatactc gcagggtgcaa aataaattta gtaaaatttc 480
aacacctgtt tatatatcaa 500
```

<210> 689

<211> 450

<212> DNA

<213> *Ctenocephalides felis*

<400> 689

```
actcaatata aatagaagca ttattgttca aaattaattg cactgagtgt tcaaccgcgc 60
gtcgaatttc gctctcogtt ctgctgatgg acgctattgt ggcttataat tctcgtggct 120
ataataaatg attattatat agaaattcag aagagtgtc cgattcgatg cgcattattac 180
tctttgagac ggtccaacgc gaccctttta agtaatgcct ttcacaatag ggatgcatta 240
aactaattcg ggctgaataa aatattttta cagtttgga aaataaacta ctaaccgata 300
attatctaca cactatgaaa ttttaaaaa aactaaattt ttggcacttg taaaatgaat 360
gcataattgt tcatttagtg cttttttatg cttaataatt ttgaaatcta ttagtaatga 420
catgacattg tgctttcaga caaattgctg 450
```

<210> 690

<211> 351

<212> DNA

<213> *Ctenocephalides felis*

<400> 690

```
acattgccct tgatgttgcc gatgttgtga ttgacgtgga atttgggggt cgacagaggg 60
tctattgggg gtatctccag gggtttgtaa ccgtctttga tagctggcaa gatacttttc 120
attgattcct ttatgcattc gttcaaattg gggtcgtttc ttttgcaaat cttgaagaaa 180
tccggtaagg gtgcttcggg gtcgacgaga gctttcgctc ggcagagggc ggtcgtcgcc 240
aaaagcacia ccacgcctg cattttgtcc attgtaaata aataattatt atgaatagtt 300
tcacggcaaa tcgtaatctc aattagcaat acnatctgct tcctggttgc t 351
```

<210> 691

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 691

```
accaaaacct agataacata atttatcacg aataaattta ataaaatata aatataaata 60
aaacaatata atacaaatat ttaattaatg catttaatta tatttagtct tatttgtaat 120
gaaattagga aattttttatt atactctacg gaaaggtaat taccctatga gaagttaaac 180
tcctcgagtt cttcgaactt taccacacaa acttcataatc ttatgtttgt tcaaaaacta 240
ctatttcgca ataaaaatca ttttaaaaaag aagccaaaaa cccaactcca attcgttggt 300
tcaaagggtg cgaaattata gtaatttatt cgccgcgtgt ggcacaaaac taagttttta 360
aaaaataaaa cagattcttc catataaaaa ttggtctgga taatgacggg cgccgatctt 420
cctcttggtg ataaaatctt ggtgaacttt tgccaagaaa gtcaataaaa cgccaattnt 480
tttcattcgt atcattatta                                     500
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<210> 692

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 692

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acacaatggc aagtaattct tatacataat cagttttcat atattttaca tttcgtatat 60
tgatagttat agatatttta gttaattcaa tccttttcag ttaaaaatca aatgaactag 120
tttatttttag atcacatatt ttacaatatc acattcattt ttttatgttt ttcaaaaacta 180
cactcataaa attataaaca ttcataaaat tgctagaata aaaattgtta aatatgtaga 240
taaatacctcg tttctaattt ttacatcttg attaaaaata aaatagtttag ttcacaatta 300
tttgtaaagt gaattaaaaa aattctaata acagaataaa aacttttaggc taatataagt 360
cagttttaca taaaagttta aatgttatgt tgctatatata tattatataat attacatcgc 420
ataccataac tacattttaa cacaaagtat tataatactt agtattaatg aatactaaag 480
tgnattatgc ataatatatt                                     500
```

<210> 693

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 693

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aatctttggt tttcatggta atatatctag gtgaaaattn nnnngcaactt ttagacaatt 60
tttaattgac attgctaatt aattaaataa ataaaaatga cttaaagtta tattaataat 120
taataattac acaaaatagc gtattgagtc ttcttctgat ataactttcc aaggactaca 180
atattacatc ctaggatatg ataaaaatca gtgatgataa aatgggttgt tgatcaggaa 240
tcatagtttt gttttacatt ttcaagacat taagggtggg gctagaatag taataataat 300
ccatagcaga aaataaaaaa tatacaaatt tcttttagtt cttcttatga gtcttcaaat 360
agaaaccaat ttatcaaaac caaatttttc aattttcgtg tttacacacc gtatgagaag 420
tgacggtaag tggctcctcag gaagacgtnc agaagtagtg gagctgtagc tggatctgta 480
gctcctgggc atctcnagtc                                     500
```

<210> 694

<211> 434

<212> DNA

<213> *Ctenocephalides felis*

<400> 694

tgaataanta ctagtnaaac ttannnttttc gttgtttaccg aataaatacc tgggngagna 60
nntanngtaa ttacagactc ctttttatat aaaaaattaa aaatttagtc gaaatttatt 120
tatnttgtga natctatact tattttatgn cnntttttaa tatttatntt tagaacgttt 180
gcataattat agttaccann ttggaattac ttataaccaga antaanttaa aaaaaaacan 240
ttcagtgccct tatgcaagtg gnttataagg gngtttatgt aaacagnaaa atatgtgcaa 300
tatatcaaac taattatctg gcgtagagaa ntgaacagtn ttctgggcaa naattagtna 360
acntttgggt tgatatataa accaatagag gnttatcttt ttgtgtcata taggtggaga 420
ctcgcttgaa aagt 434

<210> 695

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 695

tcttgaatta taagtgatca ttatganntt tattattgtc aatatttggg gggatataaat 60
tatgattaac catatgattt agaattttat tcctcgccgt atataaatgt atatttgngt 120
aaatnttgaa ttctaattta agaacagggt aatantttta ttttattgtn ttcattaaaa 180
ttcctntaat tccgtataag catctttacg actttattca gcgattnttc ctattttttt 240
tatcagctta taaatgtcan ttcttttgaa aagtttatat gattactttg aagtgattta 300
tcaatatatt cttaaatcat caatttttct tttgaaaatc agggctggcg gaaggcgng 360
tctgctaggt ctgcaaagcc ttagggcatt atataaatat gttgacgagt gcatataaat 420
atgtctgaaa aaaatcactc tgcgtattaa ttaatatgga ttaaataact taataatttt 480
taacttccga tggnnagtta 500

<210> 696

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

<400> 696

tantttcttat acataattag ttttcatata ttacanttt cgnatggngg ggngttatag 60
atatttttagt tnatncaatc ctttcagnta aaaatcaaat gaactanttt attttanatc 120
acatatttta caatatacaca ttcttttctt tatgtttttc aaaactacac tcataaaaatt 180
ataaacattc ataaaattgc tagaataaaa attgttaaat atgtagataa atcctcgttt 240
ctaattttta catcttgatt aaaataaaaa tagttagttc acanttattt gttaatggaa 300
ttaaantant tctantaaca gaataaaaaac tttaggctaa tataagtcag cttacaataa 360
aagttaaaat gttatgttgc tatattatat tatatatatt acatcgcata ccataactac 420
atftaaacac aaagtatata atacttagta ttaatgaata cttaaagngta ttatgcataa 480
tatattttta atataaaaat 500

<210> 697
 <211> 454
 <212> DNA
 <213> Ctenocephalides felis

<400> 697
 acataattct taaataataa aatgtgtttt ntntttttaa ccaanaaaaa ttttgggggg 60
 gntttntata aaaaaaatna cacttatttt ttattttatta tttcaataat taattaatta 120
 ataataatacc aataatattt atattttatc agaaattaaa taattttaatt aaatattgac 180
 tataatctag atgtgnataaa ncaaaattac nctttacaaa gtcaattntt taaaattgaa 240
 aaattttinat ttctagtaa taaaatataa aatcgtagaa ataaatgntt gatagtggat 300
 catattggat aatatatgct cattatattt tattatatat gtgggctctt taggcaaatt 360
 aaaattctgc ggcaaaanca tattcatcca gcaattcgcg agtttagaac ataattattg 420
 aaattatata taacattttt aattcattca ttgt 454

<210> 698
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 698
 ggggngtgac aatggngtgt aaanaanagc atgtatatan agtnactaa ttngatctat 60
 agngagnggg gnggngaaat ntactgggna gtcgccttan aacgtngnga ctgggaaaaa 120
 ttctgnggtt acncaattta anagcnnatg agcanaattn nacttttnat cagcntgggn 180
 aaatanengn anaggtncgc nactnatatg nnccttccca atanntngcg nanatnttga 240
 ttggtgaaat gngatgtgtn tntgtagcag gctcattaag cagcnggann nngtngtggn 300
 natnntnna ntnggatact cnttatactt tgaaaanant ccttanagca tnggtnttaa 360
 nannttctt tnattatntt tnaaggtnaa ggnttaaaaa gcttannnnc gtntatgttt 420
 naaaanantt tgntttcntt annngagant aatttatgag tnttatnngn ttntagatnt 480
 nttaaanann tnaattatgg 500

<210> 699
 <211> 436
 <212> DNA
 <213> Ctenocephalides felis

<400> 699
 attatatatn tgcatgttaa tttnaaataa cctgtctgca nttgnaaatt ngggngggtt 60
 ttcgttttta atggatagtt atttttgtta ctcaaagttt ttatggagaa ttncgttttt 120
 tggatatgtc gctttatcaa tggcatattg gaaaaaaatt taaaatcact tatgttttaga 180
 gaagaactna gaaanaaaaa tattatgtta aacagcttct ctgaagtggg atataaattt 240
 ttcaaaagca tngctgntta ttgaaacaga agtatcctat gactatgttg caagggattc 300
 agttaattaa actcagggtca aggaatacga gagtctgaag atcaatttng aaaaattggg 360
 caaaataaaa atatttcaaa agctagtaga aacatctgga agataataga aacgagctga 420
 ataagcactg catagt 436

<210> 700
 <211> 225
 <212> DNA
 <213> Ctenocephalides felis

<400> 700
 cttatcttact gcagcatacc atacgttgaa gatttatatt attagtnttg ccaaaatttt 60
 gttagaagaa aacatttttag taccaggctc atccctacac tccttcaacc aattctttac 120
 gaacattaaa tccccacccc catccaatct caatactaata gtagtatatt ctgnttcttg 180
 taatgactgt gcttttcaat atattggaca aacctcccaa tatgt 225

<210> 701
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 701
 ngctaaatgt gcaaaaatga cagagagAAC tangctgtcc gatttgaatg attcaaagaa 60
 gggggggggc ttgtttcaac aaaatanttg ctcttggaac aaaaattaaa ntttttattt 120
 tnaaaaaaaaa tttttntttg tatatcgaaa atanttcaga ttttaatttt gatttttggc 180
 taaagcnnnt aaagctcact aatatacnnt ttttnatacc tttattcatt atattgtcaa 240
 tcaagactta taaagtctta taatacaaaa ctgcttgctt agataataat aagaacaata 300
 aaataaagta aacaaagcac gtnatangta gtagtantta agaaaccaa cgaaanttat 360
 aaantgaagt aaaaaatana aatataantg aaaaaagacg aatatacttt aaataaatan 420
 attataactt tgcgattaaa nttaaatan ttttatatat attaaacaat ggtacagtat 480
 ttatagtaat ctatttaaaa 500

<210> 702
 <211> 494
 <212> DNA
 <213> Ctenocephalides felis

<400> 702
 catggcatcg tgcctaatg caaattgctg gaacttcacg caccgtaatt aaaagggggg 60
 ngaaataaaa ataataata actgttttaa ataatttcag aaagatcatc ttctacatat 120
 ataaaaataa gtcgggtttt ctttcctatc gaaataactc cagaacgcac gaaccgattt 180
 cgacaattta atatttcgct ggaaaggtaa caggctccgc aagggtttata gctaagaaaa 240
 ttagttgtgc atggcatcgt gctttaatgc aagctgctgg aactcccgca cgttaattaa 300
 aaattcgagt aataaaaaata atcaataact gttttaataa atttcagaaa gattatcttc 360
 tacatatata aaaaataagtc ggggttttct tcctgacgaa ataactccag aacgcacgaa 420
 ccgatttcga canttttgta ttccgttgga aaggctcncg gctncgcagg cttatagcta 480
 agaaaaattag ttgt 494

<210> 703

<211> 499
 <212> DNA
 <213> Ctenocephalides felis

<400> 703
 caataaagaa ttggatttan attatttaca aggtcatttt ctctattcng gngtttgtat 60
 gactccccgt aaacaagatc aagacctcct cgcaggtat atcatgtatt gaagagaacg 120
 tcctcaacat tctcgcagca tcttttagtg agactagaga aaatgcaata tcagaaataa 180
 gacatttatt gtaattaaaa tttattaaaa tctatagcat acaaagtatt aaaattaaaa 240
 aagtttgacc agcaatggca tacacattac ataataaaat tgcgttaaaa ctgacaatca 300
 aattaaatca attattcatt agcggagatg aagaactcca cttttttagg ttgaaaact 360
 tcaacacgaa atttgacgag accagtaaag aattcagact ggaaatttgt ttcagtcaaa 420
 cagattttgt agttggcagc attttcaatt tcgtctcatc atccaagaaa tctccatttt 480
 ggaagcacct gtgttgtaa 499

<210> 704
 <211> 376
 <212> DNA
 <213> Ctenocephalides felis

<400> 704
 aagtattgac gaagttaagc acaaattact caaaaatttg ttaagaaaca tattngtttg 60
 taattttatt ccaaagatc atacactgga gaatataatt tcaaaattat aattgtttat 120
 cctgcatagt aagtcctgac gagctcccaa aatatgacga ttaatatatt acttaaatta 180
 aatatacatc gngctgtcgg caaagttaag tacaaattac tcgaaaattt gttaagaaac 240
 atattttttt gtaattttat ttgaaagta cacacaatga aaaagataat atcaaaactg 300
 taattattta gtctaccggg gacgccctga agagctcctc aaaattcaca agtgcaatat 360
 aacataaatt aatagt 376

<210> 705
 <211> 118
 <212> DNA
 <213> Ctenocephalides felis

<400> 705
 ttctgtataa gtaatttggt tgtaataatg ttcagtgtta acgaacnggg tgagctgcat 60
 gagcaatgct ctaccaact gtaaaactct aaatgttggt aattcgaact acgactgt 118

<210> 706
 <211> 289
 <212> DNA
 <213> Ctenocephalides felis

<400> 706
 taaagnttag tttagattta aattcattta acttgnattt caatgntatt attattgcaa 60

aataaattct tcaataatgn anatcaacaa atttcctttg tgttacaaaa tttnatgta 120
 ttttttaact ataataagtc ttcaatatatt ccaaagcagt atgttctaca atgnaagtaa 180
 tttaaaataa gtattggtgn aaaattaaaa taaatgaaat aattaaacaa taaatgcttt 240
 atttttaatt aggaaatcan atcaccagta tcatctctaa gaaaaatgt 289

<210> 707

<211> 202

<212> DNA

<213> Ctenocephalides felis

<400> 707

aaataatatg cgctcgaatt gaaagaaatg cccgcgctcg tccgggattt gaacccggga 60
 cctcccgcac cataaccgga aatcataccc ctaaaccaac ttttgattt gccacttacg 120
 tttaatatct aagccgaaat cataacccta gaccaacaag ccacgagttt tatccagtgc 180
 atgtttgtgt tggaaccaat gt 202

<210> 708

<211> 300

<212> DNA

<213> Ctenocephalides felis

<400> 708

ttggtatagc ctttccagaa ttactcatat actngaaat acngnacn gn tgtaaacttc 60
 ttgcaacaaa gcataatagg aaatatgttt tctctttaa tgactcttta aattggcggt 120
 tgntgaacta tactttatct gctgngtgca tactagttga ttttcaacta gttggttcaa 180
 tgcccatcac tagttaaaat catttatgat attgaaaaag attaaaagtt gattatacta 240
 aattattata tagccctcgg ctattttctg gaatatattag tgagtaaaag cagcaaaagt 300

<210> 709

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 709

acattgatac tactttgaca tgtcggaant nttttctcag tttgttgntc ttttgatngg 60
 gggngtcac aatatattact tattaataa ttntgcgcta tatctaaatg tatctttaa 120
 attaatattt tgcaaattag caataactat caatgagtag atctgctcat agtaagtagt 180
 atataatttt atatcgaatg ttagtgtaaa tgaccgtttt aaatttacag ttctagaata 240
 ttaaacgagc tttgtgaaca agggtgaaag atcaaaataa catcactttt taaactgtaa 300
 ogttgacaat attatgttga aatgatcaaa ttacataaat gagtcagcaa aatttggtgc 360
 taatatattg ctcggatttt tttgaagaat ctagtntata tttggtatat atagatatat 420
 agatgtgncg tatacctata tgtgcgtgcg tgtgtgccaa attaacaata tattngccaa 480
 agatatgtat atgccagtct 500

<210> 710
 <211> 425
 <212> DNA
 <213> Ctenocephalides felis

<400> 710
 accaaaaatat gggttaattat tatatatataa attttttttta gttaaataagn ttttgtatgc 60
 gngngnaaac atgcttttggt nggaatgcna aaatagtga cacaagctt cattcngcaa 120
 acaaatagaa gttgtgtatt gacatatctt gatttcacat taccatttac ttaaatgttc 180
 ataataatat ttgcaagata catagcgaaa aaaatcatta gctatagcac aattttcata 240
 agttgttaat tcatgttatt tttattagaa ttcaaatttt atcataataa cacgattaaa 300
 taaaataagc acaatgattt tatcatgtat accaaaatgt cgcttgaagg taatatctac 360
 atcttaaact agaaaccctc attaaaaata taataattag atttagtatt tggtgaaata 420
 gtagt 425

<210> 711
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 711
 cttcgttttac caaaaaatcg ctaattttnt ttttacaac gtcaaaaaac tactcanggg 60
 gntcaaactt tcataaattt tcaaaactaa actacttggt gtaaggccgt aatatttcag 120
 taagttctat aagaccatga tatataaagc caaaaaagta tcacgggctt aaattttttt 180
 tcaacagtta attacaagaa aacaattaca tgaaatcttt aagcgctcat aacttttgaa 240
 cgatttatta taggatattg atgttcccag gtgaaatatt ctaaatcaaa agatctttta 300
 tccagtataa aaagttttta gatacctctt atcgttcgcg agatatacgc caaaaacggt 360
 ttcaaatttt taagtttgaa ttagtttaaac ggctatagct cgaaaaatat tcatgacgta 420
 tatgaatgaa atatgcgtat ttaaaatatg tatctgatgg tgcaaaaagt ttgtaatagc 480
 tctnccgttc cgnatatttt 500

<210> 712
 <211> 499
 <212> DNA
 <213> Ctenocephalides felis

<400> 712
 ctttgcttca aatatcgaag acatatttnt gaagaaaatc ttggcacaca ttgannngnc 60
 nctgcacctc gcatgannnt cacttgaata ctcttgatga aagagtgaga aatagaaata 120
 atcttcttgc aaangttcac tngcatggag aaacctgaaa tgcagtttat agaaatatat 180
 tccacgcagt gaaaccantt gcaocgacta ataaacgcaa cgntttcant tacgaccgca 240
 nttcacaaaa aaccggcgct taaaantata ctaactattt atatgcctng gaacgntctc 300
 gctttaagtg cgaanccgca tttatcantt ggggcnctta aatgaaatct taatccagga 360
 taagggtcac taattacgca tggnaacaaa acagcaaadc ggtgacgagc ntaataantt 420
 aaaaaaaaac atnacaaccc ccggtatatg ttaancnaaa aatntanaaa agcctgaaan 480
 ttgggganaa attaaaacc 499

gctggagtta ctgggattgg accactacac ttaaagacac attgggaatc caagtagtcc 420
ccattagcta aacncttcaa aatgctacta taatggtgga nggtangctt ggctnggcgg 480
gacnccttag cgatntnnga 500

<210> 716
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 716
actaaatgaa ttacaaatta tccgtatata tttanggaat attttacata tatggacang 60
tggggmntgg aagcttattt ttgntnttaa tattaactct tttatttaca actgtccagt 120
aaaggacatt tagtaaatth aagnnnttac aatagtcgcg cgagaaggga cattgtatac 180
tacattgtca tggtggaaaa aacaactcag tantcgncct tcctttctat ataaaattca 240
caatanttta ttattgaata attacttata aataatgatt aagttatttc tattnttttt 300
ctcaggagag ttgatagctt acatccattg gcgcttaata aatgataaaa atgnataatc 360
anttgatgaa ataacttcat acaattatta ttacannntt taatggaagc ttaatgaatg 420
ataaaaanta taataaantg atgaaatact tcatacnata ttattacaac cncctttattt 480
cattctacac tgggacgaac 500

<210> 717
<211> 363
<212> DNA
<213> Ctenocephalides felis

<400> 717
tatttatgt attaaatgaa accttttntt tnatacctan ntttagnggc aaatgggggg 60
nttngaaata aaaaggcttt ctataaatct atcgtaattg ggtcatcatg aaaaaaatt 120
gattccatat atactacnac caantcgant ngcaatattc acatatagct ttcgatatgt 180
ccaaacaatc gaacatatat aatatttant tcatatttag gtgatttaat tatnggtaaa 240
aagggtgtgg catgtttgaa gagatatgta tatcgctata caattaaata tccacattat 300
tatataaata taattttttg ngcttattta tctttatcac tttcagcttt ctttccaatt 360
ggn 363

<210> 718
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 718
ggncanttta ttntcatttt tatggataag ntttntgaaa taaatagtca acagaaccnn 60
gggngnagnt annncttta ttgcttgga atctatctat acaatagatt taaatanntt 120
agttccngnt tataangtaa cngcngncc gncttcaaaa atatagaata anttcgataa 180
ggactagcgn ttgtcanntt tgcacaacaa tcagccatct cngtaaatat ccgaaaagga 240
aaaaaangnn cgtctacgcn tnagcccaca nttctanac gatttttaaaa atacaaaacc 300

gttcgaaaga tattgggtgg gaatganatt gattancctt cngnaaanat ctcttttatt 360
gacagnttct tgngaataac tggcaaaaaa acncttgacg acnttatgaa actcctttcg 420
aananatatt ataggctcaa tggatatcta aaatanaggg cctcacanac ggttgcttaa 480
aantataaa ggggaaaant 500

<210> 719

<211> 353

<212> DNA

<213> Ctenocephalides felis

<400> 719

aaacagaaaa atatcaaacc ttcatntnt ttcaatacat anttatctac aagngnnggg 60
gggngagggg nngngactac tacaatacca tcactttttg cttttaattt tattccaant 120
acatactang agcngnettc nncgnetcaa tgcctcattg aatccttcgc acaaagttaa 180
atcagatcgn ccttggtgcgc attgnaagaa ttgcatgatt ncccatgcgc aagggccagt 240
agagttcttg gccttggtta gcagnacttg cgnangcant ngntgagggg cttggggcagg 300
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<210> 720

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 720

aaaaagtca gaacttccaa aatttttttna aataaacctt tcttcaaaan gcngggggggg 60
gaagaaaagt aangggggnc tcaaaaatct ancntttttc gaactaatan ttgcagaaga 120
ttcggcagca ttcacggccc ngcccncanc ctttcagacc aaaactgngt tcattactaa 180
aacantnatg nancttcacc atgttcaatt attctgaaaa tanttatgca ataaagaact 240
gcanttcac cagattctat tacaatcagc tgctcctcgt ggaatctcaa taccataann 300
cttatgnggc agaatgaagc gcgctcgnan ataaatgaan ttacggccgg tatttacaan 360
tttaactcga cantaattaa aacggattca tgtnccgaga aacttggat cttacatata 420
aanagcggnn ctgngtttat ttcgactctt aagnaacntc attgcgctaa ccctagagag 480
anatttatgg tgactnaana 500

<210> 721

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 721

actttgaaaa tttccaactt atttcatttc ttgnggcata gttatcaaca gagagacttt 60
ctgggagaaa gagccgctcg gggcacgcag ctgttttcgc tgcttgatat tttctacatt 120
gtttgagtct cttattttcat taacaagcga gttcttcaaa ggaaattttc gcagcttgca 180
caattatatg atgtctcaac acacgacagt caataatctt cttgaaatta ttaacactat 240
tctatcaacc gaaaatatat atttatacat aatattatat gacatgatat aggaaaaaga 300

atttttaaat attttttcta atatagagta ggacggtgca caattcgaac ttaaggaact 360
 acatgacaac acataacatg tatcaaaacta tctactatcg aactgtgttc aataaaatgt 420
 ttagttaatt tctaattata tcctttcata ctatttttct aaaatttatc atctgtcatt 480
 tttatcacat aggctgagta 500

<210> 722
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 722
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 attttgcaaa acaccattca atagaatttt gaattcggtt gccatcgagc caataatgag 180
 ttcgctgatt ttgttttaat tatcgacgtt attgaggaat gttaagactg ttgacaaatg 240
 tgattagaat cttaactgat atatagttaa actatatoga atattcatac tatttgtata 300
 gacagtgatg tgctgacacc caggatttca cgaattttta ttgtaaattt aagttgccaa 360
 atatgcattt ttgtgggttaa ttttgagggt aattttattgc ttttgtttct atgcagagac 420
 aagaataaaa tgattcaaag cgtaaacacc aataaaatgc tactatatatc ttacttgat 480
 atttttattt ctattattgc 500

<210> 723
 <211> 151
 <212> DNA
 <213> Ctenocephalides felis

<400> 723
 acaagtgtta ataagagcac gtttgatgga tcnactgggt aatagaaatg ttcgtgaaaa 60
 tgtaaatgtt tactaataaa tatatatattt actaatgcaa aacaaaatta tactaataaa 120
 aaaataactt atgtatcact tgatataaag t 151

<210> 724
 <211> 167
 <212> DNA
 <213> Ctenocephalides felis

<400> 724
 acgcattgtc taaattgtaa taaaaatggt ntttaataga attgttttct tagacagaca 60
 ttttaaatgt atttcgaaaa tattactgtc acatgtgaat ctgtgaaatg tgtcggtttc 120
 attgccaaag tcacatgtaa tgtttgatac atttacagat tcctagt 167

<210> 725
 <211> 381
 <212> DNA

<213> Ctenocephalides felis

<400> 725

acaaccgttg gcaaatatca acttccacat catnaccaaa tgttttatcc caatcaggcg 60
atgaatccaa atgattgaat tcattacact gttcaggctg agtgtaaaat aatgatgttg 120
gactttgagg cggagtataa tgatttagtt ccactttatc ataaatgcgt tcaaattctc 180
gtaaaagact ctcaagtgtct tgttgaataa aatctgtggt atcaaattgc tgaggaaatt 240
tggtttctcc gcttagagtt ttgttcatac cagttgtagt agacaaatcc tccagcagag 300
gcaaattccac tttctcctcc agccattgag aaaatgcttc attagtaaag ttatcttcca 360
gcaagcacga atcagcaaag t 381

<210> 726

<211> 424

<212> DNA

<213> Ctenocephalides felis

<400> 726

acaaaattta tattataatt caaataaatt taaaaaata ataatctgaa cttttatatg 60
agcaatccca tgttggaatt atgttgcaac tatttgaaag aaggcagcta aattaagtta 120
agttaattga agtttggaat tacgttgaat ataattttaa taccttttaa gacaaaacgg 180
aaactttcac atgaaacatg cttaaactgag taaaggactt gtaagtcctc tgagaagtgc 240
aagcagcctt tacaataaac taccagacga actaaaaaca atgacagacc taaacagttt 300
caaaattaaa ttgaaaaatt acataagaga caaatgaaac aaatgagtta aaatccctat 360
tttaaatcta tattantnt gntntgtaaa atattaatca caattnagta tnagttgtat 420
gntg 424

<210> 727

<211> 488

<212> DNA

<213> Ctenocephalides felis

<400> 727

acatacatat acatacacag acatccattt ttntgatgta tgccaaaatg ttcagaaacc 60
ttcaaaaaca aaaaagatcc tgaaaaatta tgaggaaaat cacacccaac aaattgatct 120
tttttatgat ttcaaaaatt aataatacaa tattaaatta tacactacct aacttatgtt 180
ttaattaagt atattttgtt ataggtaggt aatagttttc gatctttgac ctaaaataat 240
ttttgaatat ataaaaatta tagaacatat gtgtaaatct tttaaaattt tgaagacttt 300
tttaataaat cgcaaaaaag tggatattaa atttagttta taatctttta gttcttggtc 360
gaatgttaaa ttaaattttg gcaaaagttaa gtttccaagt catttttatt atttattaat 420
gaaacaatat tagctttttt ggtaagaaaa tcggcacttt ttggtagggtc aacatttatt 480
cttgtgag 488

<210> 728

<211> 290

<212> DNA

<213> Ctenocephalides felis

<400> 728

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acttttcatg atttaattgt atattaacct antaactaat ataaatatat ttattagggc 60
gggtcaattt aaaggctact taggcacttg tgattttcgg attctaggga tcaaaataag 120
atactttgct gaagaaacca cacctctaaa atgaattctg atgtccgggt cattgactca 180
ataagggttt aattttgaaa aacctctcag ggggggtccc agggtttgaa ccagaggcat 240
gagttgattg gccttctaaa gttagtcata catttggaag caattgggggt 290
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<210> 729

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 729

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tngttcaaac tgtttccatt tacaaacaat ttgaagatat atcaaaataa ggttgacaat 120
atctgacaat gagtgccatt atctgttttt tattgatttt ttgcagtgtt ttattttctga 180
tcaaagggtt aaaaaagttt atcttgagaa tcttgttott atactagcac gttgtagaca 240
aagtaaatat ttcattttta ttttaacaata ttaaacctgt gagataagcc aattaaaaac 300
tgctcatata gataatttat gatttcacgt ttttaacaagt ttaaccaatc tattcgaaat 360
caataatacc tttaaatgta aaaaaatata aaacaaagaa atgtaactgg cttgatttat 420
ttgctaaaaa cagctgataa acggcaaaat tcttcgaatt tgcacttgat ctatataaaa 480
atatttcggt tttagcaata 500
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<210> 730

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 730

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tttgatcgta tccatacctt tatagcgaag tcgggaatcc ttgtgattat attttcctaa 180
aaaaggaaag aagttctcgc atactgaaaa gaaaagtttt gtctgggtgg ccgatttcga 240
actttcaaac ttattcattc ggttaccgog accgcgaatg aaatattatg atttttcttg 300
ctcttgccg gaataagata gattgacttc gaatattacc ggaatataag ctggctgcga 360
gtaaattgtt tggatttgtg gcttttantt atcgataaaa tatngcctn ttngagnatn 420
gttggaanct cnnnggtant nttcagggtcc catggntacc nttagnctaa ttattaattt 480
ngtagnncca ccaaaccatn 500
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<210> 731

<211> 256

<212> DNA

<213> Ctenocephalides felis

Variable	Mean	SD	Min	Max
Age (years)	38.5	10.5	18	65
Gender (Male/Female)	50/50			
Marital status (Married/Single)	60/40			
Education (High school/College/Postgraduate)	30/40/30			
Occupation (Student/Professional/Other)	20/40/40			
Religious affiliation (Muslim/Hindu/Christian)	50/30/20			
Family size (1-3/4-6/7-9)	30/40/30			
Income (Low/Medium/High)	30/40/30			
Health status (Good/Fair/Poor)	40/30/30			
Smoking status (Smoker/Non-smoker)	20/80			
Alcohol consumption (Regular/Occasional/None)	10/40/50			
Stress level (Low/Medium/High)	30/40/30			
Life satisfaction (Satisfied/Dissatisfied)	40/60			
Physical activity (Active/Sedentary)	30/70			
Dietary habits (Vegetarian/Non-vegetarian)	40/60			
Sleep pattern (Regular/Irregular)	30/70			
Work-life balance (Good/Bad)	40/60			
Overall well-being (High/Medium/Low)	30/40/30			

<210> 732

<212> DNA

<213> Ctenocephalides felis

acaacctggg	ctgtgaaagg	tgaacttgaa	gaacgtgatg	gtgaaaagta	tatggttatt	60
aaggangctg	atatgtcgcc	agttccttca	aatgttaata	tttatgcoac	aaatattttc	120
cctgataaag	cagtcaatga	cgttttcta	gtgaccatga	atcaaaactg	gcgctcctta	180
tacaaagagg	cgctcccaat	attgagcacc	ctctggggac	ccccaatcaa	aacaggaatg	240
aactacgttt	ttgaaaaaat	acccttcgga	cgtctgttcc	cagaatccta	aataaaaaact	300
gatagtgcaa	actgaatgct	tagaaacaaa	tatgtgattg	taatgatagt	tattagaaca	360
tgatataata	tgttagaata	gtgggttaata	tattatgagt	atataaattt	ttacagatgt	420
taatataagt	atatgttaat	gttaacaatt	taatataaat	tttgtattta	tattttatttt	480
gttatatacg	tgtaaaaatc					500

<210> 733

<211> 500

<212> DNA

<213> Ctenocephalides felis

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agattcttct	tattataatt	ttatttgaat	atthttgatg	caatattgta	ttaatgcat	120
tgtgatacct	ttttacgtag	aataattatg	tgttgcttta	atgtcattga	tttaaaaagt	180
aaaaatcact	gtcttattta	aattagtttg	attctactga	tgacaaaatt	actctctct	240
gctaaaattt	tatattactc	tctgctgatt	tttatattac	tacttctatt	ttatgattta	300
atttttaattt	ggtttttaa	tagaaaagca	acgacttagc	ccaaaaatgg	tctccactga	360
cgaacgaaat	tactcttcgt	caaatacaag	tattgttaac	actattttta	ttctgagatt	420
attttttaaat	ttgaatttaa	ggtgataatg	aactataccg	acaagtttca	gattcagatt	480
tcagttacaa	tagaactcta					500

<210> 734

<211> 251

<212> DNA

<213> Ctenocephalides felis

<400> 734

actcttccca cagtgagaga aaaagtttaa gttctattca tcggtcgtct aaggaaacca 60
ctcatcagca gattgaaact caatctaattg cacgaaataa acaccaagta tcatcatcta 120
acgctaccta cgttattgaa cgccgcgaga aaaccgttcg acgcgataat ctgttaactg 180
gcggtgaatt ttatgggtcaa aaagattcaa ggtatggtaa tttttctaatt tgtgaacaaa 240
gtctaagaag t 251

<210> 735

<211> 229

<212> DNA

<213> Ctenocephalides felis

<400> 735

accagtgtta tggttatgggt atgttatacc gtttaaaaga cttcaatttc caatatagtg 60
ggagaattga gactcatcat ttataaaagc aattctgcat ttagcatccc ttatattata 120
aatatatatg tatttttggtg taaagagtaa tttaaaaaac aataatcaat attttttaggt 180
aaacgataaa tattagtata ttacattata ttaaaaaaat gtagagggt 229

<210> 736

<211> 333

<212> DNA

<213> Ctenocephalides felis

<400> 736

acatacgagt atactaataa aatagatttt agaactaata gaatcttatt gcgatatata 60
tgtgtgattt tcattataat gcataaaactt tggtataaac gagcatagtc atttagatag 120
tattcgtcat ataatcaaat ttcttctgaa aattgtctta agcgattcct ccccttaaca 180
agcgaaagt ctcgaacgaa attactactt caaaacaaat ttaaaagata aggcataatag 240
tcgcagaagt tcgacaatga aaggtagatg aaatagaaat gatataggga aattaataaa 300
atcattaagt aatcttttaa ggtgacatt tgt 333

<210> 737

<211> 197

<212> DNA

<213> Ctenocephalides felis

<400> 737

acttctcaca tgcaaagcga gcgctctacc aatagagcta cgcccccgac aagtgcacac 60
atatttattcc aagattctac gggttttata cttaacaatc actcacatta acatcacgaa 120
gacatgaaaa agtaagattt ggaagttacc aagatataaa atagtaatat ttggaagcac 180
cgggatatcga tcccgggt 197

<210> 738

<211> 354

<212> DNA

<213> Ctenocephalides felis

<400> 738

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acagaccttg agatacgggg gcaattcttc ggcttgaata atactgaaaa acgtcacaaa 60
cgttaaaatc actacaatat tcgtgatcgc cataacgatg ttgtttctgg atgtgtctgg 120
aagtcaaagt gcgtgatttg aatttttgtt gcgatttttg ttctgtatcc ttagataaaa 180
tctgcgccct tgaccgtaat gccaaattca agatgataaa ggacaaagat gtaagtcgaa 240
attatcactt ctagagcact tgacatccag ataaacaatg acaggcctgg aaagaatcgc 300
ggtttactta tatgagaagg atgcgtggct gatgtgtcac cttgtccttg gttg      354
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<210> 739

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 739

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agttacaagt gcaaattgaa gcctgaaatt agctgaccag tattgaaaat agggctcata 120
attttatgtc aagtcagtta agagaacaca taatctatta aataaaataa aattcaaaat 180
aaagggttaa ttccaccctt cttttaacac tgctaattgtt agtttgggat cgactaatcc 240
acaacaaaag tttatgagta gcaaaaattg ctttttgata tttcacgaag aaaacatatc 300
taataataat tgtgcgtata gtttctaaag ctaaatacca tattctgtaa tcatgtatgt 360
aatatataaa aatattgttt tttaaaaacc attttttttt aattttgaat tcgaacgatc 420
tatataatca tagataaaca agtataaata ttggtgtttt ttcagaattt tatatttgcc 480
ccacggtcga cgctagcgcc      500
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<210> 740

<211> 293

<212> DNA

<213> Ctenocephalides felis

<400> 740

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accaatattt ttactcaaac ccatgaatga aatcaaagaa attttcaagg acaaagaatc 60
tgacatacga agatcaatca gcccaaacc acaaactata gaaagttaat tatacaataa 120
tcaaaattta aaaaaaatta taggtataat tgaaacatgt gctcacactt atgatcgtta 180
agcacaatcg accaaagaaa ttatgtgtaa tttgtattta aactaaactg tatttaatat 240
atgttgtaat tacgaaactt attatacttt ctagtcaaat ctaaacatgt tgt      293
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<210> 741

<211> 124

<212> DNA

<213> Ctenocephalides felis

<400> 741

actggtggag ctttcgtttt ggtcttggtt ttactttttt ttataatatc atcgaaagcg 60
 ctggacgctc cattctctta aaaactcaaa aactaaattg ccctttttgc tctttttccc 120
 ccgt 124

<210> 742

<211> 278

<212> DNA

<213> Ctenocephalides felis

<400> 742

accagatcta agttattttac agtgtaatct ctgtaaaaaa tgcacccatg aagtttatat 60
 cttgaatgta agttgaataa tgtagctatt atttgtaaaa tcccttttaa attaaaaata 120
 agacttggtt ttccatgtct tttatcaaaa atgtttcaat attgataaaa ataattgttaa 180
 ataattcagag tcatataaaa tgagtttcta gttttcttct taagatcttg aagggttttaa 240
 taaaattttt aaaaaattat gcgcttttta atctgtgt 278

<210> 743

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 743

accatcactc catgagttcg acaaccaact agaaaagacc catcaaccaa ttgaaaataa 60
 attctaacia ataaaaaaat attaatattat aaataaaaata ttacctgccg tttttccata 120
 ggctaaactt atttcgttta aaaaatcttg cactgttttc ttaacaccat cacttgtaaa 180
 aggtgttatg agcctttgca gatatgagcc atcctaaaaa taagatcatt tatttaacia 240
 attttattta gggagcattc tagtctagga gtcaattttc aactttctga aggagttggt 300
 tgttttctcg aaaaaatcog atttgccaat tttatttttt ctcaacgttt caagtcattc 360
 tgaatcaatt gagaccaaatt ttgaaaaaat atgtgtatgt tttcatgtat gtgagccgat 420
 ttttcgtttc gttttctcaa aaacgggtga accgatttta aactagtggg gcatggcattc 480
 ggccttatgg caaattgctt 500

<210> 744

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 744

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 ggggtaatnn actngtttaa taatnnctta tgcattacaa atgttaaaat gaaattatta 120
 tgtntattta ataagataca tanaagcaat ttatcttana aatttataa ctantctact 180
 aaatactgaa atatgaattt cctantctta agattttact aaatcactga tntctgaatt 240
 gaaatattcg ctgaaaagtn attataatgg acattttcac gtancaaang tatttaattc 300
 gtaattcttg aacattctca tttngcgtat atatttcato tataatantt acaaaaaaat 360
 atttacacat gccataaaat gaatgctcca atantcattt ttatatcncc tatntaattc 420

aacacttggt ttgccaggct cttccggttt cttatcaaaa ggttcaagta attttgcgac 360
tctattttta ataattggac aaattaactt atatggaaaa ttattgccaa gtaggatcgt 420
tttaactaat tttatgtttg tatcataaaa cagaggatca gataataaaa tagcgtgatc 480
tcaagattag aatggtagaa 500

<210> 748

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 748

actggttggt attgcttgaa tcgagaagtt aagaaaagca acttttgtat gaatttcagg 60
actggttctc cogtcagcag ctggtcatgc tggtcctggt catcaacatc tcgctagcca 120
taatgttctt caagttgctg acgtagcggc ggccatatcca caacggccct ttgtggccgc 180
catgatcaca ggcataggtt cattacagtc gtaagggaat aaatcaaata gactttatta 240
acgaccagca catgtgacgc acagccgcgg cactgttggc aataatataa tcacaacaaa 300
aaataaatgc aagaaaatca caaaaaagat tctagaatcg atcgaattct tcaaatcgga 360
agaaacgaat tcgccacgaa accgcgtgac tttggttttt catttttttg gcacgcaatg 420
gctgaaaggt atcggatgcg tccagataaa tttgtcagtg ggcgttttca gtttctagtc 480
aatcgctgc aggaaaagct 500

<210> 749

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 749

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tgtccccttg atcgttgaca ctcggaat agcaaatact ggcaccacat cacatttact 120
cagcaaatag ttaaaaaatt tgtaatactc ttaaagcaaa tagcaaacgg tagcggtaaa 180
tcaaattata tcagctacca atgtttttta taaattcaaa gtctcattta ctctacaaac 240
atcgtaata gcgaaccctt gggtttgaac cgggttaata gtgcacacgc gggattgaac 300
cggggacctc tcgatctgca gtccgatgct ctaacactga gctatgtcct cacaatgtgt 360
gttactcagc acatagcaaa tacctacgcc acaccacatt ttctcagcaa gtagcgaaaa 420
ttcagcaata atcttaaagc aattagcaaa cggcagcggg atatcaatgg caagttgacg 480
ttatttacac tgatttcagt 500

<210> 750

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 750

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tgttccccgt aatttctcaa aacgcccttt tctatctct cctgtatact ttttgaatgc 120

gtgcagcagc agcagggctg aaggttattt ctgcattcct cctacggcgt cgtctctgat 180
 tggatttggg tctgcatgtg cgactagtct cgttccgagt ttcaacgttt tctttcggct 240
 tgattgattt ggtaggtct tcatctctt tccggccagg gtattaatag cctcaattct 300
 ccggcaggac ttgacctgga attttgtcag ttttgagca agcagtgaag gcgtagggat 360
 agttcttttg attgttgttt gttcgtgcac gtcttctcct cgcgatggag tcttgcttgg 420
 ccggaagtgt gtttcttctg tatggttctt aaatcgcgca ggcgttctgc aatttccctc 480
 tcatttcatt cacattcaac 500

<210> 751

<211> 423

<212> DNA

<213> Ctenocephalides felis

<400> 751

acgtatttca gaccgttcaa tccgggcgtt gtctcgtctt acagcaaagt aatgagcttc 60
 tgtcccaatt tgcattacca taatggtatt cttttttaa atcggaaaga agaattattca 120
 agaatccttc attgtatatg caaacaacaa taaatgttgc tatttcaatt acccgagatc 180
 gggaatgaat atgtttcggc gcgaaaatcc aaatcaacga gtttagagac tcattattgt 240
 tctgagtttc tgagcctaaa catcgaatta ataatttatt tgacgataaa ctgtcataaa 300
 ttggtctaatt gacttcctaa tgccatttgt tctatttagac cttgcaaaac cagtttttgg 360
 agaccgcgtc agtaaagtgc ctatatcttt gaagataatt caaattttca aaaatcttct 420
 cgt 423

<210> 752

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 752

acttatatat ctattttaagc acggaactta tatacgactg aaattcagat tcaaataga 60
 atctcgtctt acatatttat atttatatta ataattaata tgtttcagtg aaatgttttt 120
 gattttttctc tagttgtgtg aacacgaaaa ttttaattt tatgctttat tgtgtgtaga 180
 tgctctgtca ctttcaattt gcaattttga agatttagaa atatagaaga tggaacatgg 240
 tttttgtagt tgggtggttt taaatataaa agcattgtta actttccggt atagtaatga 300
 accaaaaatt aaaattgaaa atgtttgcat ttctagatgt tttgaagggt tctgaacatt 360
 ttggcacacc tcagaaaaaa ggatgtgtgt gtgtgttttg tatgtgaatt ttttccacg 420
 ttttcgggcg catggatcaa cctattttaa tggtaaaaaa aattcgattc ctattgatag 480
 gacatgtgct gattcttttg 500

<210> 753

<211> 185

<212> DNA

<213> Ctenocephalides felis

<400> 753

actatagga ataaataaat ggcagctttt tccttaggtc gccttttcaa cgtccggatt 60
 ttcattgtttc gaattataca tggcgctatg tatattccat actgcatgct cgcgagctct 120
 ttaataaaat attagtgttg gcacgttgca caagattgga ttcgatttga cacagcggca 180
 gttgt 185

<210> 754

<211> 376

<212> DNA

<213> Ctenocephalides felis

<400> 754

actagatgtt catgaggaat atttagcgta aaggctgggt cggatatatt tgaataatca 60
 tccatatcta tcatattagt atagtcggtg cattcgaaat ttatttcggg tgttttgtaa 120
 tctctcaatt gcgtcaggtc ttccacatta ttacggtaat ataagatttt tcttatagct 180
 gaatctcgtg tttccttttt attatcaaac aacattgcta ataaaatatt ttccgagtga 240
 gcatagtatg cgttttcttt agcaacattg ttcacaattt gtcttaaatt cgagtctaaa 300
 tattgcgtcc agctaataaa tttataaaat aatatactac catacaccac agagttgtaa 360
 tatttaattgt taaagt 376

<210> 755

<211> 492

<212> DNA

<213> Ctenocephalides felis

<400> 755

acttttacta atattatgat cataagctcc actttcacga tcttctgcaa gggtnattcg 60
 actgcaaggg tcgaattaca taatgggaag agcttaggta aaaaaataaa tataagtctg 120
 ttacttatgt ataaagtata aaatttttat atttctatga agttaacaat ttagaaatta 180
 acttactttt tatgaaataa gctattttctt tcaattaaac taaggctttt tgtgcaatac 240
 ttttaataca atgttatttt ttttaatatatt tatgcagcca gttttgtaaa ttctcctaatt 300
 caaaagaaac cgctcttgc tatggatatc gaaaacttta attgagaaac taaaaactaa 360
 agaaactaaa atatgcttca aagtaattaa agaagttttt tggtttatga aaaagtttat 420
 aattatttat ttagaagttt atgaaaattc atataagcta ataagtaaag caaactaaat 480
 attattcgaa tg 492

<210> 756

<211> 360

<212> DNA

<213> Ctenocephalides felis

<400> 756

accaggtgag aaatggtcga cttacttaag aaagccttag agtaattagg ttaatgnata 60
 ccaattgaaa agtagcttac cataacattg ntgcattttt tgaaataata agcgcgtttt 120
 atttaatat gtttttttaa aagaaatgct aaaagcttta tgtaaggaat gtattgcca 180
 aaaataccaa atgaaatcta gtcaacattt tattatatca aatcattcat aattaactta 240

<210> 760
 <211> 338
 <212> DNA
 <213> Ctenocephalides felis

<400> 760
 acaatatattt ttcaaaaggg tcataaaagt gttcgtttta aataggtatt ttattatgtg 60
 tnatataact ttgataaaat ttcaaacgcg tatttatata tcagcgtttg cgtatccacc 120
 ttaatttcaa ttttaattttc atcggttgat tatactgaat ataataaaga ttttgtgttt 180
 attataattt aagtataaaa ttgtagacaa taatattcta cgattcaaaa atctataaca 240
 cataattgat ttaatttttag tttaaactat aaaaaagggg aaaaactcac gatttatatt 300
 tcttctagta agtgtaagct tagatatgtt gcttttgt 338

<210> 761
 <211> 348
 <212> DNA
 <213> Ctenocephalides felis

<400> 761
 accaaaaatc ttattgcccc aaatttatnn tatctaacac tagcctatth ttatatattt 60
 ttacaaagaa aatgcgaaag ttatatatat tatagatatt tttacgtota gtcgttttta 120
 tataaatact caatatatca tgaaataaat caaataaaat ataattataa ttctatatat 180
 aatgaatcaa atttaattta atttttgtga cattttattgc tatttctgag atcgtgtcat 240
 aaatgatctc aaggaaattt tcggttgcca tttgccatga tttaaattaa tgttgcttaa 300
 atatttgcaa cgcattttcc ttataaatag tctaaattag aatcaagt 348

<210> 762
 <211> 372
 <212> DNA
 <213> Ctenocephalides felis

<400> 762
 accttctaca ttactaaaac ctctgatttt ttataaagta gatttattac aaatatttca 60
 accatcgaca accaaatatc gtgtcaaat cgatattagc ttttgaagat attctgaaag 120
 taaacagcga ttccacgtat tttttattag tttcggaag atttttattt ggctataaaa 180
 gtgttttgat tgctcgagaa caagatgtta tctcttcaca acaatcttta cagataaaca 240
 gataaactga gtcttcgatt aatggcagta ttgaaatgag gttttatata ataattagac 300
 acgaaggcag gtccagcagt ctgagcatca gtttcgtcta tgattgcaag tatatatagg 360
 gtaaggcgag gt 372

<210> 763
 <211> 500
 <212> DNA

<213> Ctenocephalides felis

<400> 763

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acggagtgtgta aaatattggtt gaagtatttt gaaatttatt aattttattcg aaaaggngat 60
ttcattaaat aaaaatgggtt tacgaaagtg actttttacac gacccgtcgg ccctacagtc 120
gtccgggttt gtcttcatac tccgtaacga cgcgcgtcccg tcattacgtg gtgacagaca 180
ctccatccag accaagggtg gcggaagagc aatattctta ctctacgc agccagcagg 240
aaagatcttc tgcagatccc tacggaagga actattcgac aacttcacc accgaaagca 300
caagacgtgc aggcgggttat ccaggatctg actattctta cacgagcgaa cgctcatcca 360
gaactggaga tggaccaggt agctacagat ccagctacag ctccactact tctggacgtc 420
ttcctggagg aaccaattac cgctcattct cataccgtgt gtaaacacga aaattgaaaa 480
attggtttga taaattgggtt 500
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<210> 764

<211> 302

<212> DNA

<213> Ctenocephalides felis

<400> 764

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acgccaccac ctctctgggca ttcaccttca ctgatctttt tcaattcttt gtgttggttca 60
cngttataat tcttcataac gcattcattt ccaaattgata tcggtttttc accatcaaca 120
ccagcgcata caggagtgtg gtcgtctgtg cagattttta tgcatgggtg atttctgttt 180
tttgcggggg tagcttcgat taggctagcc aatgccacaa ataaaacgac agccacaaaa 240
taaagcttca tctttattta tcttctttcc aaaaattcga tggtgtctct cagatatattc 300
ct 302
```

<210> 765

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 765

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acggaaggta tttatattaa tgtcaactct caaatgcata agaaaagctt atgggtcta 60
attgccactg gaaaattgtc taatttaata ttaatttctt ctatgtttgt aaattcggtta 120
ttacatattc ctgtagtaag attaatatga gtatgggttt aatttagtag tgaatactat 180
agtaacccta taaacataga cattaagttg atcaacgcgt ttatatcatt agatctttca 240
atgaaattag cattaaaaat tttcaaataa aaagcgtctt atattatcgc agtaaagttt 300
ccttaactct ccaagaatga ataaactgac gcattagggtg atctatacat caatattaca 360
gcgcgttcac tgatatttcg atgttatttg ctcacattca acatttttaa agttttttca 420
ttotcaagag tttccggcga tggtcccggt gctagtcgaa acacatgcag gtgggctttc 480
ctttctactc ccgtgatatt 500
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<210> 766

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 766

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accagagatg aaatttgcgt gcatcaccgg gaagttttgg aagacattgc caaatnngaa 60
tgactacaaa ggggtttcag gaattgaaaa cgaaaacata gaacaaataa taaatcaagc 120
tgacctgcaa aagtattatc cagaaattat aaatttatac aatacaatgc acgtctttgc 180
gttacctcta gcacatttgc agtcttgttt cacgtttaat attgaaaata ttcttaaaaa 240
cgaaaacaat atcagttatg ccaataaaaat taatggattt atcgaagaat tacaaaactt 300
tgtagtaata gctcaaacgc agtctaaatt ggggccaaat gaggaactca caactttaaa 360
agatgtaagc gatcttacca cacttgaaga tcttagtcat aaaataatta gtgaattaga 420
aaaaagcagt aacagcagtg atgaagtaag ttcatttgta aaatcattga agaccctaata 480
atgcttgtga attctataaa 500
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<210> 767

<211> 479

<212> DNA

<213> Ctenocephalides felis

<400> 767

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acattttccg caaacatggt tgttgcaact ttgacacgtg ttattagttt tattattatt 60
acaaagtctt atttggcaaa attttctttt attactattg gtatttgcaa gatgtctgtg 120
ggatcatcatt ttcttttgat tttttttgtg ttgatgtcgt gtagtccgcg gaaagctgtt 180
ctgccaattc aaacaaaaac tgttctctaa ggatttgttt tctttggatt tttattcctg 240
tcgcttcctt gtaaagaatc caggcattta tgcgagccaa atccaaaata ttgaaaaata 300
tttgcagggg tcatctattg gattggaact ggatttcacg gtatatatttc tttacctttg 360
atctgccatg tcttctttgc tgaccataaa taagtcattt tcaatttttt tgctcatagg 420
ccccacgagc atataaaaatt ccaataaatg cacgtatttc ggtaacgatt tgctaatacg 479
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<210> 768

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 768

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actcaagatt tgttacaata ctttataaga cttaacntaa taatacgata gataacctat 60
tacctatcat actatattat attattgtgt atcatcgata gatattctatt atctatcata 120
ccgtgagata catacaccgt cattaacttg taatatacct acagaccttt tacttcttat 180
aaatactact gtctaattta tatattcacc tatattatat aggtttacct tacgccctat 240
gtattatctc tacctatcta ttgtctatac caggaattga acccgggacc tccgcgtgga 300
agtcgcgcac cttaaccact accctatcgg ctaccccat taataatata atatgggacg 360
cactgttggt tccgcgggac attttctaata taattagata attaatacta aggtggcgcg 420
acaacacgcg aaaaaagacg gttgattgta gcgttacggt ggccgagtg taaggtcgtc 480
gcgtgccacg cggcgggaccc 500
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<210> 769

<211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 769
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 caactatcct ttaatgttcc aaggctatct tcgcgttcac aattatTTTT caattatccc 120
 acccctaaat ctaattctct cttaaattcg ccaattttac taatgtcctc taactttaac 180
 ttaattaata atgaaataga cattcacaac acatcaccta atcaaataat ctccatctgc 240
 acaagttaat ctttttattt tctttcaaat atcttattat tttctgttta taattattat 300
 tgttacattc tgcattatat gaaattttat cttagcattt tatgttacta actatatatt 360
 gtaattttgt gtatatTTTA attgttattc attatgtcaa ataattgtat ttttgagtcc 420
 tcttgagaaa atctgtgggc tatatatTTA aataaataaa taaataaata aataaatata 480
 tgtacaaata tacttataag 500

<210> 770
 <211> 106
 <212> DNA
 <213> Ctenocephalides felis

<400> 770
 acaaattatt gttgtgtggt agtttactan ttnagagtaa agtaaacgta acacacaatt 60
 gcatatgcat atattattat tcttatatac atataaacia tagtgt 106

<210> 771
 <211> 453
 <212> DNA
 <213> Ctenocephalides felis

<400> 771
 acataataaa tcgtgataaa attaattcaa agtagcacc aaaaccacc gaactttgca 60
 cgaaattacg ttttgttctc aaaaaagaaa aaggaaataa atcaagatgg tccaaggcga 120
 gaaatacctg gcaaccaagt ccttgtctat tgacaactct cacaagaaga gtggattcga 180
 cgctgtgcaa aaacgcgagg aggagaaaag gcagcaggcc aggaaggagc aggagcagaa 240
 agctaaatat ggagcctggg gtccgtgtttt caaagacagg gaaacttttg ccagcatgca 300
 cttctgttga aaacataaaa ttttatatgg aataataaat ttgttttata aaatactagc 360
 atactaacia aaggactaac atgattctac cttggaccta aatacaatac tcaaataaat 420
 tggaacaaaa cagagatggc aacgctttaa tgt 453

<210> 772
 <211> 182
 <212> DNA
 <213> Ctenocephalides felis

<400> 772

acaaagccat cactccacca attacgccag tttcaggcca catcaacccc gctttttttc 60
ggoccttatga cttgttagtt tggtatatct aaatattaaa tttatgttat tcaacaataa 120
gtaaacccca caacgtgaac aacactgctg ttctttgtcc tgaggtagga ttogaaatcg 180
gt 182

<210> 773
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 773
acaaagggtcc aattgaactt caagtaatta ctntatttaa accaaatgaa ctacatcata 60
catgtaacat gtgtaaatat acaactacag ttttttttct aaaatttgtc atatggccca 120
ttttaccca taaacataga taaaatggga cagtcagggg acaacagttc ttctaattgtc 180
tgattttaca aaataatagc taaatattta atcaatgaaa aattttacaaa gattatattg 240
tatatgactt agatctggta ttttatcaga agtattttatg agcagagttg gtataattat 300
taattttttt ccttgtaaaaa ttgctttttt ttaactgagt ttacattttt atttacattt 360
tttattatat acttttttgc cagggtaaaag gttcagttgg ttctttttgc cccatccaca 420
tgtaagccat tatagagggt atatagaaac atctgttgaa tctaatttga aattaacaat 480
agattttata aaacaattca 500

<210> 774
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 774
aacattttctg tgataaataa actctagttg attcgagaat atttgttatg atctttgttt 60
ctaattgcact tggttaataat aattatgcat tacaaatgtt aaaatgaaat tattatgttt 120
atttaataag atacataaaa gtaatttatt ttagaaattt ataattctatt ttactaaata 180
tgaaatatga attttctagtc ttaagatttt actaaattac tgatatttga attgaaatat 240
tgctgaaaag taattataat ggacattttc acgtagcaaa ggtattttaat cagtaatttt 300
tgaacatttt cattttgcgt atatatattca tctataattt ttacaaaaaa atattttacac 360
atgccataaa atgaatgctc caataatcat ttttatattt acctatctaa ttcgngtaaa 420
ttttttatggg ccccttcattt gtattatttt ttaatatgca attttaaatt ataagattct 480
gtgtttataa ttaatttatt 500

<210> 775
<211> 473
<212> DNA
<213> Ctenocephalides felis

<400> 775
actacgatca atggtgtgat agcttcgaat taaaatgttg atactatoga gtatccaaat 60
taaatttgga aattaaaaaa tgttgtgtgt taattgacag aatctttact tcttctaaaa 120

gcaaataaat aagttatatg ttatgttact tataaaataa ttaatatattt taaataacaac 180
aataatgtct gcattattat cttaacgatg ggaaaatgta gtaaaagtca acagatctag 240
ttgaccgat cactcctgat tattaacat aggggttaata aaagtattat aaattcatca 300
aaatttaata ttaaaaatga tcaacaata ctgatcttat tatgatcata cctaattata 360
catgtgataa tataaaattt caaatcaata cactagcgaa tactattatt agtttatcat 420
agactaatgc attgattaaa attcagggcc atccttaaat taattaaaaa ctg 473

<210> 776

<211> 499

<212> DNA

<213> Ctenocephalides felis

<400> 776

acctttncac agcctctctt angtctgatg ttagacgttc ngctngcaac ttttgttggg 60
ngtntcctcg gcnncnaacg ngagntagcc tttgaagatc tctacttgna gctgatatta 120
gctgnattgc actgaanngt ggcgtatgac tgnnaanann acnnnnnnnc ccttnccagt 180
ttntatang catntanata attntaagnc atttttataa nctattatan anattatcta 240
tnggggagnc agncataatt gaaaccagtt ttttctatca atcatagatg atgtaatggg 300
ctaactntca atagaactat tgaaagttac nccatngcat antgaaaatt anactattca 360
annatnaaaa taatacaata attatgnngn agcagntach ttttaactat tgataactaat 420
gctactttta tatcttaanc aactaagtna ctcatnttgc tagaaaaat ctaatnaaat 480
tatataaact nacatcttn 499

<210> 777

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 777

acgttcacct gccgcgcaat cacatcggct ggtcaagtgg aaacctcagc aaaacttggt 60
gttaaaagta agaaataaga catggactcg ctctaataat tgttctaaca tttaaattac 120
tattatcact agtcttgcta tattttattg ctttgttttc aatttagtat atcaatcaaa 180
gtagattaa tagtagtttt tcgagctatt taaaaatgat tttaaagcag tataaaaata 240
taactctaata aatattattg cgattgatat atttatataa attatttatt ctatagttca 300
atttaatagc tattaaaagt atattgtgaa tataaataaa attgcttgcc atagatatat 360
taaaatatag ctttaagcaac tgtctttata tcatattagt aaggtcctaa tcggtcatga 420
tattttgtgg tgttgattat tattctgtgc tgtaatcatt gtccaaatga tatctgattg 480
tttaacatga tacaaaaatt 500

<210> 778

<211> 188

<212> DNA

<213> Ctenocephalides felis

<400> 778

aatgctttga aatattttga ttcgaaatat tanatccgaa ttaaaatatt attagaatta 240
 ttatttttaa tcgttgaata tgctttttta ttattttattc attgaactta aaagcttctt 300
 ttcacaaaga tttatttaaag agcaaatatg ttttataagt gagtctactt cctgaaaaat 360
 gtcagaatac ttgcatttta atatataattt cagctaaatg acaagacatt ggcaaaaactt 420
 gtattcactt atttttaaatt ctgaagaaga cacaacattt aaaaatattg tcgattttctt 480
 gnataaatta tcgcccttaa 500

<210> 782

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 782

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 tgcagaagat ttttttctga tgcattaatc ttcatacagt tttatgttat ataaaattat 120
 aagtaaatat tttacctcaa catcacttta cagaatttca gtaaaaattg agcaattaat 180
 acaattcaat attgnaaata ctcttactgg ttggagagcg gatagtttca aaaattttct 240
 aaagaaaaat tgagtgtcaa cccgatgttc tttttaaacc ggattcgtta tatgccattt 300
 cattaagatc gaaacccaat ttatctattt ttaatgcaaa gatttttttc tataattaat 360
 gtattgacct tcatacagtt ttatgttata taaaatttta agtagaacat tctacctcaa 420
 cattacttaa caaaatttct ataaaattg agcagttaat acaattcaat attgaaatat 480
 tcttactggt ggagagagga 500

<210> 783

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 783

acttcttttg taagaattaa tttgtttata tttatatgta tgtatatgct aaaattacaa 60
 ctaggtatatt ataaatcaga agagcttggt ttaaaacaat tcatatttcg ccgactcccc 120
 tattgaaata taaattaaaa ttttgctacg actagaacgc gtggtttctt gcaaagtgag 180
 atcattttat aatgataaaa ttctgaccga aaatttatatg tcgaaatgtc agaccagaat 240
 tagttgagtg taaacgggtt attcgtcttt caatgtccgg cgtaagtcac aatacaatat 300
 acgttcactg aagcgatacg ttaaaagggt ttatagaata agaatgcatt tcaataatga 360
 ataatacagc taaagattga attatatccc actttgcaac gcatatttga gttaagagca 420
 gagaccgacg gcagacggca gagagcgatg tccatgccgt cgtcgtgcct gaaatattat 480
 tattccactt aacatctgaa 500

<210> 784

<211> 422

<212> DNA

<213> Ctenocephalides felis

<400> 784

actttcttcc caaaactcga ctttttattt gaaaacataa ttactcgggt gtagtaaact 60
 tttntaaaaat atgtaacaaa ttacttagca tctttctaaa atttattcaa ataagtattt 120
 aaattaaatc ttctctata aaatcgtttt atttctacta atttccaata aatgacttct 180
 cgctttgctg ttttttatgc tgnnggacaa acaacaaatg acatatgacc aagcgttgat 240
 atatgcttga gcatgatatg tcatgaatgt ctttattgta attatgccta atgccttaat 300
 aattttcttg aaaatatttt ataccactat tccgtttcca aattcatcta ccacgagtaa 360
 ggtatacatt tgaaagccat aaacaatagt tccatttgta tcatcaatgc aatccctgtc 420
 gg 422

<210> 785
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 785
 actataccgg tgcntaccgt ggcaagatga acgtcccaaa acgtcgtgta tcaaattaat 60
 agtcctcgtg gctaatttat ttattctgga aaatcgtgcg atttgtttgt gttcacaaaa 120
 tttcgtttta ccaaattttc ctctataatg ttccggagtgt tggccgccac ctcgatttgg 180
 ttactattgg catgggcagc tatgctaata tttttccttc cgttgatgtt cgttggtgta 240
 gcagttttgc cgggactgcc attactgatt attogaaggg tgtgctacgt gcccttcgat 300
 tcgattttaa tttgatttct tcaattaaaa aatcaatttt aaataaggca gtgttctttg 360
 aaatagttat ttaatcgtgt catttcatag tagttgtgat atttatattt tttaaacata 420
 tatcttctaa tcattgataa gtatgatatt tatacatagt ottacatatt aaggtataat 480
 atataataga ttagtcgtat 500

<210> 786
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 786
 acaattgaaa tatatcacag tcaacaataa aactgatgca atttttagcac aattgaagaa 60
 tgaaatccaa ataccataaa caacgcttaa caaccaccta gctaattgat agctagggtg 120
 ttgaatattg gtaagtaata taaataatga ctttatcata caataatatt acttttcttc 180
 atcaatttga cacaatttcc caaataatta taccaataac tgagaaaatt tttgaacaaa 240
 tttcgacagt tggttatttg atatatgtta tgtgctgata tgattataag tgtatgatat 300
 atattgggat gcttaatgga acatttccact caaagatgca tctaattgcag ctcaacaatc 360
 aatcatgaaa gatcgaccgc aattttccat cttgataact agatgtaaca aaatcgcatt 420
 tttgtttaga tatttattta tatgtaataa cactgcaatg cgtgattgga tatcaaaatc 480
 ccataagcgt tttttataat 500

<210> 787
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 787
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aacttcttgt agcaccgat ctgttatgaa gtcggggata tctttgtctg cattcatatc 120
tggtggtggt gcagtatggc ctggatttgt ttctcttggg cctgttgat gaatttcttt 180
atcatgctcc gttggcaaaa tcggaatata gctactttta tttttaaaaa tctcttcata 240
gtgaccagca atattattat tgttggtacc attaatattt atactgattc cttctgtgat 300
atctgaatat tcatcaataa aatcatcgga gcttaacgtg tctggagttg gagtcacctt 360
cggtttaaat gtggtcagac gtggcaaagg aggaaaatcg ctttcttcat tcattttttc 420
tgtcacattc atgattttca caatcatatt accgtaagt gtttcttcga ttctgaact 480
gcttgataat gcctcgcccg 500

<210> 788
<211> 436
<212> DNA
<213> *Ctenocephalides felis*

<400> 788
ncatttcaac tgagttcatt aattgagttc attaatnagt gaatgccaaag gcatttacct 60
atattcctatt atgtaaaata acgatggctg catttctttg aattacaatc gttattaaaa 120
ctaggcaaac tgaaattttt gcccttggtg tgcagtgtt gagtgaatcg cttttggcaa 180
atgggataat tataatcata tcagagtcca tattatgtgg tocaatattt agttaagatt 240
tgtattatac acacagcaaa aaatataaaa tataataaat atactctgga aagattagt 300
aaaactatta taaactaaga cttctcgata tactttcagt gaatccaatt acttcgaaaa 360
aacctttgga gttagaaact aaattcctag tagtttaagg ataataattt gatttgaatt 420
gtaggctgct gtatgt 436

<210> 789
<211> 277
<212> DNA
<213> *Ctenocephalides felis*

<400> 789
notccctcca acgcagggtg atcgctgttg gcgtcgtcgc tgatctcgtt gggggtataa 60
taaaancgaca tcttactctg agattcattc aaatttgga cttctaattg agccaactta 120
tctatttttg ttttaataa catatctatg cctgcaatat ctttgggatc gaacacaaca 180
gagtcgtac gaccgcaaga accgctttta caattctcga aatagaaact gggcaaattt 240
tctaaaacct tattaagagt ctgttgctgg tatttgt 277

<210> 790
<211> 500
<212> DNA
<213> *Ctenocephalides felis*

<400> 790

caattttgtt gatggcatga taaatataac ttcttataat taatattgca gattaaactn 60
 gtggtatact ctttttgcca tcagcatttt ttattgattg aatacaacag attgttaaatt 120
 aatattttcca atcaataatt gtgatgggtt atttctacta gatttgaaaa tcatttgatt 180
 atgattttaa catataaaaac cgttaaattct cgttttaatt atttgataat agtgctgaat 240
 tacacattgt agccattata ttaaacaatt attcaaatac ttattagtca aaattagttg 300
 ttactataat ttaattttaa tattgtgcaa ttttatgtag tataatttag aaatttatta 360
 ttaaacacgt gttttattgt gaataaaaata taagagattt atgggaactt tttcaataac 420
 tgaaattgag ttgctttgca ttttttaatt atgatgaatc gtttttgaaa tccatattta 480
 tattttatta attgacctgc 500

<210> 791

<211> 326

<212> DNA

<213> Ctenocephalides felis

<400> 791

wcmdkccadg nhtastcrys ktwbkhtnta hdvdacsagd mhacrncvwr tbwwyrrwyk 60
 vnwmtnsnwr manrgarcyr chsnrcnamnb tydnachcks mcratndats trandsncnc 120
 ttacaccctc catgctgatg ttgaagaatc ctttcgtgtg tatttggaac aggttgacgc 180
 ctncatcaaa tttataattt ccttcgaaaa tcaaattgtc gaacatcagg tcaatttcca 240
 tttctaaact gtcacgtgct acagttgtct tgacttcttt gatttcgcaa ttgctgctcc 300
 cgaagacttt gttgtctttt cctgt 326

<210> 792

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 792

accgttggtc ctagggggat aaaataagca gggtataatt tttgtaaata acaacaatat 60
 ttataatcat actggaattt ttacagaatt tgtggagcaa gcctagataa aaattttgcc 120
 ttattttctca agatgttcat atcttattat ttatgttcaa tattaaataa aaacattacg 180
 aattatgatt ataaacatta ggaaataaat tacaatatga ctaaattaat tttcaatctc 240
 ctatcatttc agttaatttt tactgggtgct attatagact tgcttcatta agtttcagaa 300
 ttaccttcaa tagttgtaat tataaaatat atttataaag tctataaatt agtaaaaatt 360
 gtatccgagt aagcaatttt aaacagatta ttactcact taatacattc actaattata 420
 tggaatacta ttagttagat tagaagtagt ttatgaacaa atgatttggt catataggag 480
 tggcttggtga caacaaaatg 500

<210> 793

<211> 219

<212> DNA

<213> Ctenocephalides felis

<400> 793

aatatgggca acaataaaat gaacattaac aacgtgaagg cgtaaagtc gcaatactgg 60
aagttatacg tttgaaatta ccatgtggct catattagt atgtttaata catttagaac 120
ccacaaccac gctaactgat aattaatatt tctaaacggc aatacgtgta tcattccgtg 180
tctgctatct tcgccataat caaataaaat tgtttatgt 219

<210> 794

<211> 252

<212> DNA

<213> Ctenocephalides felis

<400> 794

acataagaat aagttattat tatgaggtta acgacgcgcg aactaaaatt atcacgctga 60
aatttattgc ttgaatacat attaaagtaa cataaattca aacttacaca tttattcatt 120
tatattaaat gaataaatgt ataaagatta ttaccattca cgttcttcac atattgcgtg 180
cttacattat tactttgatt gtgcaaatat tataacattt acattatgtt ctaatgagtg 240
atTTTTTcat gt 252

<210> 795

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 795

acttagctgc aagctTTTT atattctgac ctgtgtgcat gagttctcta aagtattcgg 60
gacactcatc acgtttttaa aatcttaaaa atccgggcat agcagcaaaa tatgttgact 120
gcagctgtgc ttgagaccaa ggtccagagg cttttgcttt atcattttct agaccagctc 180
ctataattaa tgccgctgtt tttgttcgca tagtgtttgt tgctactggc cagtaatttt 240
tcttagaatc ccatttcttg atattaaatt gtcccttata tactgtatct aaaagttttc 300
cgagctcgaa agcttctttt tttccacctt ctgttaattt actagaactc tctgataagt 360
tagtcaactt gggctctcca ggataattgc aagcttcatg gctggacctc ttncatacaa 420
aaacaaactg aagttatcat tgctaaaatg tattgactga ctagcaaatc aaaagaatca 480
ataactctca tgtactataa 500

<210> 796

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 796

cgggggccna cncttatccg atanacccat agaccttata cnttcataga ccttatncaa 60
tacatggacn gggagntnan cgcataaaaa gcgtcaaaag atgtcctacg gnatgagggc 120
gtacgaggggt aattttgctg ccgagatatg tcaaatacga acacgagctt taccganatt 180
agtogaatgc actcgatcgc ttaaatttta cagttacttg ggttcacgtg atgtttgatc 240
gttcggnntt ttaaactaaa agatgataaa aatatacctg ttgtaaaatn ngttaaangt 300
aaaatgtctt ctaaaatgtg taaggnaagg tgcttgattg cagtaaaacc tgttttgtgc 360

tggtctgtat gcttcgcaag nattccggga aatncgacat tgatcgttta aaanatcgag 420
gattcttttna tatccttcga ngaatgttta tttatgttat atatagantg ctantcaaag 480
tctttnttta tgtacaaagt 500

<210> 797

<211> 324

<212> DNA

<213> Ctenocephalides felis

<400> 797

gctgaaggca tgaacgagca attgagcaat ttaacttaag aagttttgac ccaagcccaa 60
gcaggggccc cgcacgtgcg ttccagtgtc gacaaattcg ccaaagaaca cgaagccacc 120
cacaccggcc actaattata aacagaaaac cttctgtgat catcatttat catatcaaat 180
atatatataa attcattaat taattaaaaa ttgttttata gttgtttaaa taatcttcgg 240
atatttgtaa aaattatttg gatgctcatt tgatttatat tataaataa atacttcata 300
aaaaannnaa aaatanaaaa aann 324

<210> 798

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 798

gcctggcctt tgtggtcacg ggcaggtaaa acccttgaca acttcgattg catttcacct 60
tacattttca aatatgtatt tgggtgtgca ctagtaattt gcataatgtg tttagaatgt 120
tccgggtgaaa ctttgctgct atttataaac gttaagcggga attagtgcac tacgttcaag 180
gtattatacg agcataattt tacataattt aattgattgt cgcaagctac acatttcatt 240
aattattctg attctattaa ctaccgcaga ttatcctgaa actaaaaaaaa atatagattt 300
ttaactatca aatatctctt tacctactgc tgttcagtat tcttttaaca gtgtttgaat 360
tgataaatgc ttttcactat tttatttgcg aaaattatgg aatattcgca aacactttat 420
caaataaaat gataaatttt cgtattctca aaagtaaagt cttgtagnaa tctaaaataa 480
tctaatacat gcccaaagtg 500

<210> 799

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 799

acaataaaaa tacgaagata taaataaaaa aatgagaatt aactttttta acaatatggn 60
aagaaattta ttataagact aaaatatattt gttgtatata aaggtaagac acaactaaaa 120
taattgaaaa atatgcaata actcactata caaataattt gaagaaaaaa caaaaaacac 180
ggaaaatata atgcaccaat tactatacaa ttgtcaaagc acgaattttg aaaactatta 240
aattaaaaca aatattaaat taaaataaaa taaatgaaaa ggtttttaaaa aataaactct 300
tttcatcgag acgtgttata tgtttggaag aaaaattact agtgaattgt gttgtgtgtt 360

tctatgtaaa gataaggaaa ctggaagagc tgtttcggtta ttggtgaaag actgagatag 420
gaaagttttt gtggcgcttt gccggcgaaa aaatacgaag taaggantgg aaaatatagc 480
tttgattaa gctgtaatag 500

<210> 800

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 800

acggaatata cgtttccgtg acccttgagt gccaaatcaa cagatggttc aggactgtgg 60
gnaaccttan atcttaattc aacacttcct ggtgattttt tctttgagtc gttaagcgtg 120
aaaactgact cagtattgaa accaacaaca gtcttctcgt ccaatccgct agtttgaagg 180
tcaagtgggtg caatcagggt atatgtgata ccttgggtatt cagcgaattt gctggccaaa 240
tagaatttga tatcttggaa tggtaatttg gcggctttaa catttggtcc gtgaattcca 300
ataattgttt tggtagcacc agcgcggaat ggatattcaa cagcatcatc atatgcagca 360
taagcagaag tcaatccgaa ttcatacttc acgtcattca cangcttagc aatagttcga 420
taagtcatca agttttcatg tccagttttc aatgggtgtag ctggtgttat cattacggnt 480
tacggtccag nttaccacng 500

<210> 801

<211> 166

<212> DNA

<213> Ctenocephalides felis

<400> 801

acacttttaa cgactaatgg agcggagtag tgacttatca cagggggccgt ataagccaaa 60
ggcgctacgt atcctgggcg agcaaaagct acagctacga gagcaaataa aacgaccagt 120
ttgaacattt tgatttagtt ttgaataatt ctcaggaggt ctgaat 166

<210> 802

<211> 266

<212> DNA

<213> Ctenocephalides felis

<400> 802

acttaataaa atatttaaaa tttgaactct acttctcttc ttaaaacttt tcaaattaaa 60
ancatttatt ttagtaaact atgctcatta ctattaaata cacatatcta ataaaatctg 120
cacatgaaaa gaagagcggg taaccgctgg gttgctccct tgagaaatat ctaggctata 180
tattcaaaga aaaaaatta tagaacacgt agttctgatc gctattgata taaatatata 240
aaataattgt aaaatattaa caatgt 266

<210> 803

<211> 499

<212> DNA
 <213> Ctenocephalides felis

<400> 803
 catataatac taattataaa tttaaagtgt tgggggttgcg ttgcttctgg gaaaaacatc 60
 gcaaggaccc atacaccgaa tgaaaaaaaa taatttatta acgaaacgcg aattactaga 120
 acctgccgtg gggggtaggc gacaggaaca catttaaacg cggaaatcgt tttaaacgat 180
 attaaaatta cgaacaagtc ctgcgacgaa caaaaaaaaa attaaaatgt ggacgcaaatt 240
 aactcaaaat tataatttta caacattata aaaaataatt aaaaattgtc aatgtgattg 300
 aataaaaaaa attcatgcac aataaatccc taaagcaatc cgccactgcg caaaacactg 360
 tatgaaatct gaaacaaaac aaatgtagtc aatcgtaaat atttgaaaca taagatttat 420
 attaaaattt aatattattt aattatattt aaatttaata atctgaagat tgattaaatt 480
 atttatatta actcaaagg 499

<210> 804
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 804
 gaacaagagg tttaggnatg agatctgcaa aatttgggca agatctaaaa tcgaaggaaa 60
 ttattttata tgaatatttt gaatgtaaaa aaatgtgttg aaaaatttat attgtaatgg 120
 atggtttcat aaaggcgggtg ctagaaacaa aattattata gttggtttta acatatattg 180
 caagatattt caaagatatt tgttttagatt atttttctac atttattttt catgctctta 240
 tttatagaat cacgattacg ataaaatgtc taagtttaaa tattgagtct gctgatcttg 300
 agtcctaact tcaatatcag aattgttggt ggcattgttg tagaagcact tctgtgaaag 360
 atcttttgcc catatgaatc tgtggtcaat caatttgcac gtgggttgct tataattttt 420
 cctatttggc caattattct ttggctacga ttttgagaca natcttttcg gtatcaaata 480
 actcttgatt cgaataatca 500

<210> 805
 <211> 216
 <212> DNA
 <213> Ctenocephalides felis

<400> 805
 actaaagatt ctttatattt ttaatatgtt ctcatcgcac cgttttaatc tagttcaagt 60
 tttataatac acaaacatct tataaattta agtataaaat ctaaaaatta tcacacaata 120
 aacgctagtc tttcagagta aataatataa cccttaagac tttgattctt aaattaatgg 180
 taatatcaac cacaaaatat tggaaaagaa aatcgt 216

<210> 806
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 806

actgtaaatt tttacacaaa atgcaaatat ttaatatctc ctataattta tggattaatt 60
ctgccttatg tcggaagtca accggatcat aaaaagtgat ctaattgcgt aaaaaaatta 120
gtcacacttc tgccaacgta tatcttggag catcgtttta ttcacagata tgggtgcaatc 180
atttcaatta tacgttggta gatcttctag tcttagtctt gtttttataa tcatagagga 240
gactggagaa aagaatactg gaaaacctta ctgggtgatg gatatccaca atatcgttag 300
cagatagtat ctgggataga tttttggagt ttttagtcat ctagtaaaat attttttcac 360
taatattaac aacatccaga ataagaattg atcaaaaatt tttacttcat tttataataa 420
gtttgttagt aattcgtgat aggatatatt tttattactt tgattatatt ttaataactt 480
tccttccatt ttaacaacgg 500

<210> 807

<211> 355

<212> DNA

<213> *Ctenocephalides felis*

<400> 807

acaagaatgc aattattggt cttcaaagga aaatgattga ttttctacac caacagataa 60
aacagtctct aaaagaattt gtaaaacttg aatatttttt tcggtgatac ttgcaggaac 120
cgtaaaatac aatcaccacc accaocctta gcttcagcat tcttggtttt tacctttttc 180
tgtttttaac acctgtgaac tgcccttttc tcgacttcaa ctggctcaac gatattttta 240
gataccaaaa aatatcgtat ctggataaat ttgttgtgtc tgcttttaat attttagact 300
ttcatttttg tattaacatt ttttgtgaga acttttactt ttactaagtc ggggt 355

<210> 808

<211> 424

<212> DNA

<213> *Ctenocephalides felis*

<400> 808

acaagcgtat gaccaccngc tcncccgct nngttggtcn gtagtaaaag aaatctaaac 60
ctnnngttct tatttattaa gnncattgng taattcaact tacacctagg taatttatta 120
ataattatcc aattattaat aaaaaaatt aatattgact acttaattac atttatattt 180
gctaaaatag tatatttaca tcaatttttt ttttcaaagg caatataaca gaaaaggctc 240
ctgataccat gatcaggcag attctttcag cttgtggtcc agttgtttct tggaaacggg 300
tttctgcatt tggattttgt gaatttaggt gtgtattgta atgatttatt aataagacaa 360
aaatgtctag gttattaaat tacgaaattc attccagttg tccagaagct gggttaagag 420
cagt 424

<210> 809

<211> 500

<212> DNA

<213> *Ctenocephalides felis*

actttcaaac ttattcattc ggttaccgcg accgcgaatg aaatattatg atttttcttg 300
 ctcttggtccg gaataagata gattgacttc gaatattacg gaatataagc tgggctgcga 360
 gtaaattgtt tgatttgggg ctttttatta tcgataaaat atgtgcttcc tttgaagatt 420
 gtttgaaact tctgtgttat cttcaagttc acaatgataa cattaagctt aataataaat 480
 atggttagagc aaacaaaaaca 500

<210> 813

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 813

acttttcaaa ctatactgga gagttttttt cttntatttt ttattgtaat tactatcaat 60
 acgatcacct cgttacggtt tgacgttgag ttctgggaca ccctgggtaa attatgttaa 120
 ttatatgtat ttgagcataa atacatgtaa agcaaatgta ttactgatag acttttgact 180
 ttaactttac ttgaattagt aataaaacca catgatagaa aattattgag tttttttata 240
 gaaaagttaa ctgttgattt tttttattaa atcattgcaa tgtgctaatt cacattcttc 300
 attactcaat tttatgccca actcattata atattttgtt tttcttaagt tttcataact 360
 cgtatcagaa ctttctcaaa gctcatccct agctttactt taaacttcctt attatttcac 420
 tgataataag aacttttgat ttttttaaac atatatctat caagttaaag tttaaaatat 480
 tcatgaaatg aactttgatg 500

<210> 814

<211> 285

<212> DNA

<213> Ctenocephalides felis

<400> 814

tctgantatt ttatnaatat ttaagacatg tgcnaanntg angtnnnntn natanaanaa 60
 tngtgcnnta tcaaaacgtn actttttttt tctctccaaa ggcaattttt ttaaaaaaaaa 120
 ctccgattat ccgaatatat gattatccga atgggtcccg gtccccatta attcggataa 180
 ttggagttct actgtataaaa actttgtata tttttgaaaa ttttgaaaaa actattgata 240
 tttgtttcag ccatacaagt tagtttaaaa attaataatc tcggt 285

<210> 815

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 815

actcttcttc gttcaccaat gaagtttgat tgtgcatatc aaacttcctg tgtccaccat 60
 agccctgaat tctttgccat ctatggtgac acgtttcata tatttttctc ctgtctgac 120
 ctttttatca gcaatccaaa ttatttcacc actaggattt ttagtgtcgg tttcaatttt 180
 gatcttatta cgttctgggc aatcctgaat aaagtgtcct accttcctgc atcggttagca 240
 tatcaottct ctttttcgag attgttcact atcttcttta acctcacact tcaactttcgt 300

gatcttatta catctcgtat cattaacagt tctttaatth ttcaataatc gggaacattt 360
 cactgctgct ccctgttata taagcactaa gtttttgaat acttcttggg attctaaatt 420
 tgtttaacaa ttgtaaaagg tcgttcttac cttttaggaa aaatgatggg tatagcacia 480
 ccattagagt atgaaatttg 500

<210> 819

<211> 431

<212> DNA

<213> Ctenocephalides felis

<400> 819

accgataatc tctcaagaaa tgctaattctt ttaagtgaat ttctcaaccc tttagttagc 60
 caaggngttg aagtattatt ttttgggcaa acggtttttt taatgagagg aaaagtttga 120
 ttgaagttga ataaaaatgt agaaataaag ttgtcgaaca ttgtatttga gtctttggac 180
 ttgttaagca aggtccatga ttctttttca agaagacatt tgaaaatcaa tttattttgat 240
 tcatcaaaat aacgtttgtg taagataaaa gtagatttag aagttgaaaa attacaaaaa 300
 tttaatatta tgctcogatg gtctgaaaga gtggtattta taacacgcga atcaaagtct 360
 tttaaatttg tgaagaaatt atcaatgcaa gaagaagatt gatgcaaaaa acgagtaggt 420
 tcatgtatag t 431

<210> 820

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 820

actgaaaata acaaattttg aattattata gttttacagg tttattttat ctaataaaaa 60
 angntagttg acattttcga aatatgtgaa atatatttca acttacggaa aattgcaaat 120
 aaatctgtca tgggcatgac agtatatgta tatttagcag tatatgtaat tgatttgtcc 180
 acttttatcc attgggtaac atcatattta ccaatatctc tgctattctc acatctgtca 240
 atagctgctc cacatctagc agttctgcct ctgtccgaac aggaaattta ttataaactg 300
 ccagtgtata atgaggcaaa tcatcettca tatcacactg gcatcactgc ttattaagcc 360
 tattcattaa aacttggtgc cgtaatgaat cagccttttt attaatattg agtgcaaaat 420
 ctgaacaata tacaacctta tactgaggtt taccacaata ttctatcaaa ggctcttcga 480
 aatgcataga catctcacia 500

<210> 821

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 821

acaaatagaa aaaatactta tttttttata acttatatac catatgaaaa ataataaaaa 60
 ctttatttgt ttacgtcact atgctctatc attattttacg aaaaattttt atatgcttaa 120
 agctttttgt taataatttt caataaaaaga ttcaactaaa taattatata atataaataa 180

aggatttaaa gtttatttga tattatataa gttattagaa tgaaatctca ctacataaga 240
 taaaattcaa ttttatctat gtctcatcga aatagttgta taattttgaa ttttgtgacg 300
 ttttttattt tatttaaatt tagttatatt tgaattgnta gtatcatatt ccattaacca 360
 tttttcatag gtatcaatac aacttttata ttcattattat atatttataaa aaaatgttta 420
 tgaaattttt aaataaatgc aatagcagaa tgtattttca ttagttatac cgaatatagg 480
 aaagccagga gcttgtgnaa 500

<210> 822

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 822

acattaaaaa tatttgtttag agttaaattt gaacttgatg acagtgc aaaataaata 60
 taaannattt aaaatttgta tgaattcaag ttaaaatag tatgaatctt aataattaaa 120
 ttttgtgagt aattatata atatatagata atagattttt aattaataga taacaagttt 180
 ttagaactac aacaattgta ggagaagggtg aacatcttaa ggaccaagag cgaaatcttt 240
 gaatatcaga aagaaatggt tcaaaatgat acgaaaaatg ttttaaagtt ataagaagaa 300
 attaatcact tgaattttatt tgaataaaat cttattttaa ctccatttat taatactcat 360
 ttccaattga acttctcacg aaatttataaa aaattgaatt tattttattt taagttagtt 420
 aagagttcat attactaaaa gttaaatttc attatgtatc ctttaatatg ttcaccgccc 480
 tcccataat tttattaaat 500

<210> 823

<211> 240

<212> DNA

<213> Ctenocephalides felis

<400> 823

actccatgtg tcataattct attattcaat atgtgc aaat tacgttctaa tataaatcgt 60
 gacaatatca taatatattt atcgtggaaa taatatagca attgcaagct aactaatgct 120
 tcctagcgta ggagtatttg taaccgcgcg gtatagcggt tccacttggg ccatcatcgg 180
 ctgccaaatc ccctccaaga cctgctccgg ccctgcccga tggagatcgt gcttcggcgt 240

<210> 824

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 824

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 atctctgggt tctagtatac tattgttagt ataatcagaa ccactataaa aaaagtcact 180
 ataaaagttg aaaacctaat ttctaagac tattatacta gagcacatga taagaatgca 240
 gaagcaatat aaatctatct ttttgtaata aatttctata ctattactat tacttttctt 300

agtggctcgt aatatgcaaa caatcactgc caccgcagta acttcagccg taatttatgg 360
cacatcactg ccgatatgat aattttctat gcttttatta ctctgaaaag cgtttcgttt 420
tggccacggg gtcgggttga aaattttcat cgggtggaac ttgccgtaga cgtcctcctg 480
ctgctcccc cttccacag 500

<210> 825

<211> 370

<212> DNA

<213> Ctenocephalides felis

<400> 825

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ttagatctta gtgataaatt aatagtgtaa ttagaacagc accaaatata taaattatgc 180
caataaatca gtgtttcaca cagcactgct acaaaggta aactaaccta gcgtcttgag 240
ttaatcggag gagagactca acacttaatc ttgcaataat cttgatatga tattgtgatc 300
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<210> 826

<211> 166

<212> DNA

<213> Ctenocephalides felis

<400> 826

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acgtgaccac gccacgatt gcaaaagaaa ggggtgaagaa gaggggtata tcatggccga 120
acagcgataa ctcagaaaat aattaaatct ttaaaaatcc tcgcgt 166

<210> 827

<211> 304

<212> DNA

<213> Ctenocephalides felis

<400> 827

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tacaacacat agcaaataat atataaaatg aagtttgaat agcaaatact agaaaaaaga 180
caaaatactg gtttacatgt atcaaaaagc gtatatattca taaaaaatgt atgggtggtc 240
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<210> 828

<211> 352

<212> DNA

<213> Ctenocephalides felis

<400> 828

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ctaatagaac gaatntttct gaaaaacgtg atatgggtta aacataggaa attatagtaa 180
attattcatg agagtatatc aataagtcaa taaatatttg tcttctgaat ctttttacat 240
tnggctctgg ttaaatttgc ttactaaata tagaattttt agctttataa tttatctata 300
ttcattanat ccggtccaaa ccataataaa tcagatttga tacaagatac gt 352
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<210> 829

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 829

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tgatagaaaa caagtgtatc tataagcttt gacattatat tacacaaatg atttatcgta 180
gatgaaataa aagaaacatc tgattctctc attactacca tattttatgg atatgggaat 240
aatggaaata agtaaaaaaa atcatatatt ttcttgctaa agagtagtca tttcaaactc 300
aattattagg gttaaaaatt aaaaagaaca tataccgtaa ttaggtcaca atattctgtg 360
gtcatcgcca aacttagtaa caccaaaaac accactaaat ttaagcataa ttgagaataa 420
aagactaaaa taattcaggt ctacttttcc taatgcgtga cactcacgga anacgttcaa 480
tgcctcaatg tgtgacttaa 500
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<210> 830

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 830

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attaaaagaat caatagthtt aatatataat atthgaccta gccaaaaacc agatattgth 120
tatctgaatc caggtattgt agthggctth ttcttggtat gtagthttatt acaagtcgth 180
taaaaattgt attgthtagc taththtcaac aatcttattt gaaaatctgc thtgthtagcg 240
aattacagag ttaaaactat tataththtca cthgaaggca taththtagat gaaaaaaatt 300
ttaggtgaaa gccaatatca gtaggggaga caatagatca cththcttct tataatthaat 360
gagthcatcat cacgagtagt thtgthtataa atththththt gaaatcagtc aaaaatgtht 420
actactaatc atcagththt taatcagcaa aatathcggt aaththaaatt atatactgag 480
actagtcgaa tcatcattat 500
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<210> 831

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 831

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tgcattggaca ttacgtaaac attgacggat agttgtttta attaatgac acctaataca 180
tatttgacca gtattgcaaa tttttgagtc acaaagctat tgatttagat ttttatatat 240
ccttataaaa gctattttcta tgggtataatt tatttaattt aacaaaaatt tgcaatatta 300
gcttgatttt taaaaagctg attaaaaattt attgtgaagt atctaattta ttaaaaaaaa 360
tctaataataa tgaataatat agaaatgaat gaaaaccgac tcgagtgcag tcaacattac 420
tgataatgtg atttgatgca ttttgcttta ttaaaggota aattagttca aaaaggccag 480
tgtttaattt aatatttatc acttatttaa ttcaaataat taatcactcc agttgtatta 540
taaataatgt 550

<210> 832

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 832

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catgcaaaact tctacattgt cattctcgaa cccaaatgac ttacctattg ttttctttta 120
gtaaaacaat gattgtgcta aattagcaaa agcgttcaaa ttttattatt ataattagga 180
actgttggtt ttagtgactg ttattatcca attctaataa aaaatgacag acacacctga 240
taatgcccga attactacca tgggtgaaga tgtttttgca ataacattaa acccagaaaa 300
atttggtggac tgtgaacaaa aaccagatta tattcaaatg atttatctag aagaactagc 360
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aagggtgatg ctaacaaata tcacagaatt tgtntaccaa aatccagtaa gccccatat 480
atagattatg tagttcagaa taaagcaatt tctattaaat ctgttatgaa agacttagaa 540
gtacatgctc 550

<210> 833

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 833

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aataataagt tttaaatttg aaggttatcc attacaatgt gtaaaatttt tttgctaaac 180
aaataattct agacaaaaat ctaagtgcct atcatatagg cacggactat agacaaaaaa 240
atacaaaatg tttccaaaac attatgattg ttcttaaaaa caaattgtgg acttttagtt 300
gaaaatgaaa tgtgatttaa aaattgtcgt caaaaaatat tggtagtagt gaatgttgat 360
tgccaaaaac agtagctgga aaatagtac aaaaacaaag gttttggtag tgtttttatt 420
tgcaaaatat tggcgtccag attgtgatga taaaattgat agttgagttg acatagttgt 480

gtacaattaa taaaacaaag tngtntaact tcaagacttg ctgctcttca caaatctgat 540
tgaatataat 550

<210> 834

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 834

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agctaacgac taacggggag gataagcggg gggccacgag gcgacccag tttcatttta 180
catgtgtgca cgtatgcgaa ataacagttc gtcgacaaga cgttgtagct cggccctata 240
gtgaaacacg aaaaacctca tatccgatgg gataaaatcg accgaattca gcgagcgact 300
gaagatcgcc gcattcaacg tcctaaagt aacaacttag catcagttgc ggcgcggtga 360
gagtgccgcg gataggacag cgaagcgatg atcgatccca gttcgtctga agaagagagc 420
gaggaagagc atggaggagg cggcggaggc gtcaagcagc agcaccacca tcacagccgg 480
cagcgcgcgc agcggagtgc ttcgtcacag cgaaggcaac catacgtca cggcggcgag 540
tccggcacta 550

<210> 835

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 835

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tgtaattgct taatgcttca ttgattgttc tgttcattct aaggttattt taaacatcta 180
acaatctggt ttttggtaat aaaaatgcct agattgtcta gattaacttg tgctgtggag 240
gattgcgagt ttagtacata tgatagaaca ataatgaat tacgcagagt tcagtttttt 300
gcattaccat ctggattctc taacagagat cgtaggtcga agtggattaa atggctcagt 360
gatatcaatg gtgaaaattg ggaggatatgt aagtattcac atgtgtgctc tctacacttt 420
attggtggga aaccttcaaa catgctttta catcctgata tgctccatca ataaagactc 480
gagatgatta taccatttag aagaaaagat gcctggcaag tttgaattat aaaagcaaaa 540
atgcaatnta 550

<210> 836

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 836

tgcacgccat caacgaccac cacgaagggg tgtcatgcgt cggcacggat ggctcaacgg 60
caaactctcg cttgctgtcg agcactgtaa gatcgacacc ggctgttctc ctcagcacgg 120

<212> DNA

<213> Ctenocephalides felis

<400> 839

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acttattttt gtatgtttgt atttaatat tttttaaaaa tttagcgaca cgaaaaaata 180
agaagcaata ttattgatct aataaacagg ctgcttaaaa atacctctaa ctacattagt 240
gattaaatta taaatttagca attgcgaaa ctttttataa tactaacaaa gatattaatg 300
tggcagctga agtaaagat acatctggta gctaataatg tgtgatgatt atattttgct 360
tattacaaat gttattaaat tgtatattat tattaatgag taccaatttg taaataggaa 420
atatctttat tcagcaattg tgtggaaagc atagtcaatt ataaatatct ataaaattat 480
tgtattgtaa atctaagac taattataat aatgtatgaa tatgaagcaa tctataaatt 540
tgngcctcg 549

<210> 840

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 840

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tttgggtgta acttgtatgt ttgcttcgat tttgtcggcg tacgcacttc ttgtggaact 180
ttcggtgaa cttcatcctg atcaaccagc catgtgcgat attggtgaac atatgagttg 240
cagtagagtg ttgacatcca ggtatggcaa aggccttggga attgttggtc taatattagg 300
agaaaattca aaattcaacc aaccaacgg atttactggc attatcttct actccttcac 360
ttctacttta gctctcatag agaaacgttg gacagcaaaa attcaattag ctttaagttt 420
catatcgatt cttctctcaa tttatttggc atgtattcta tttttgtct tcacgatttg 480
nggtagtttg cgtaccattt acttttaa attaattc atacttccta taaaagacac 540
agttgtagc 549

<210> 841

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 841

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caacttggtg ggttantata nggantacng catctaccat nttcgccngt ttaanaagaa 120
cntggcttga gtgantantn aataacagnc taacctgcc ctacgangat gannaangcc 180
ntttcaantt cantgggagg aaggtancag acatatncnc ttttaannng aaagctggan 240
ntgaatgatn ngcatgaaat atgtaactgg cttacgtgac ctgttntact ancntaattg 300
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tatagancaa ttttnngacn angacnatgt tgatttttct nnncanattc tanannnncn 420
ttngganaca ttntgtagnn tttnnnnnat gangncanaa ttcnngagtc gatgttctcc 480

antatgtttc aacgatttnt cctntacnta tncnnngnaa catttncagg nacaacctca 540
gnnangnnc 549

<210> 842
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 842
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aagcagagtt agggaaaagat ttaccatgat ggtaaatggt tgatgaaagt ggtttgagtt 120
gttctgagaa caaggataaa ggataacagg gttggagcaa ttttttttgc gaggacaatg 180
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aatgtaaaca aatcacgtga ccaatttact accaaataat ttttacaatt tctgccttcg 300
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cgaggacaat gatgattatt caattcacat cctacatcat cattgttatt catttttttg 420
cttttagcaa aaatgtaaac aaatcgtgc gattttacta ccaatttatt tttacaattt 480
ctgcctctac tgcgagatta acttttagca ggcacaacct ttaccagtca caaccggttg 540
aattttgaa 549

<210> 843
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 843
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tttacaatct gagttaagta ttagccaaaa aaatgaagga caatatacaa caaaattagc 120
tacagctttg gaaacagttg aaaaaaatat ggacacggagc aataaaaggg caatagatgc 180
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atatttgaac cttctgatga caatttctgc gaaaatgaag atgaagatgc cggcctgact 480
ataatgtgta gtgaataaat ttntcattca aatgtcttgt attaaaataa atattctagt 540
ttatatgct 549

<210> 844
<211> 548
<212> DNA
<213> Ctenocephalides felis

<400> 844
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atcgtgctta cgtccaagtg aattattgac tgatatgtct atagtggctt ctatcatatt 120

tagagtat ttt tgaagctttt gcggtatgaa gtaagtagca gtatgcggca ttctgggtcta 180
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gcaaattgta gtgatatcaa tgtccgattc atcattaact ggctaccaga catctcgag 480
cagtctgaag gattaccagc atcactgact cacccaatcc ttgcgtcaca ccactctcat 540
tcaacogt 548

<210> 845

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 845

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agaattgtgt cataagtaga agaagtttagc ggccaagatg tggcgattgt tgggagccgt 180
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ctgatgtcga ttctgtgtgc cttctctcct tggaggactc ggaggatttc tgtgacaatg 540
gcatactct 549

<210> 846

<211> 481

<212> DNA

<213> Ctenocephalides felis

<400> 846

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aagccataga ttctactttg atagtgttga tgtagcttga taattttcat taatcaaaat 180
cagattaaat tttgogaacg cgggtgtgtta gtaaattgac ttcatattga tatggaatcc 240
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ggtgtaaact attgtatgta catgtgcaag atgttaaata aatagtatca ttgtnaaaaa 480
a 481

<210> 847

<211> 548

<212> DNA

<213> Ctenocephalides felis

<400> 847

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ataagaaa 548

<210> 848

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 848

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tccttgacagg aacttgccg caaggtgcaa caactgtgtc ctctctacc aatggcaatt 120
accacggcaa ctatggatac ccattctgtc tatcccaagg tttcaacaat ttcaactcat 180
tccaactac ttacgatcac tacaacactg gagtagtcga tactgttggt tcttctccc 240
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caaccaccgg ttataaccac ccagttgtcg caaccaccgg ttacaccact actggctaca 420
ccactccagc tgtatcgact ggatacacca ccaactggata taccactcca gcagttgctt 480
ccactggata tactggttgg gaagtatcgt ntggtttggg aggatacgat ttacacatct 540
attcaagga 549

<210> 849

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 849

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gtattttatcg gatcgcgaaa atctttgatt aaccaactaaa aaatatattc tatgcaaata 180
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ctctccaccg attcggaaac ttctaataac tccaaccggg gttgtctgca tcccttcttc 300
tatctcaact tctttttcgg catatgaatt aagaaaacac tgttataaaa tttagaaagc 360
aataactaaac agtcgaatca catgcaacta aaatttcctg ttgtttatta agttttttcg 420
cggatacttc ttocatctca gccgtntttt cttttcaaat tgogaacttg aaatatcccc 480
agaatgaggg aaatttctgt gtgcatttta aatatatgac atcagaaatc ttttttggaa 540

actactgtt

549

<210> 850

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 850

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gtgtgtgtgt ctgtgtacaa taattcttgt taacaattac ttattattgt gaacaataaa 180
ataataagag ttaatatataa ctttttggtt caaatagttt aaaacaattc taattaaata 240
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gccacaaaac atccggaaca gctacgcccg gagctcggca accggagatc gtcgaacggc 480
ccggaggcgg cgaacttaca aacagatttg caatgctata aatccaagcc cctacgcagc 540
cctggagcgg 549

<210> 851

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 851

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cngngtgatt taaaagtgg gctccanaga atttgtanga gctggcnaca cgccccangc 120
tgcccgccac gatgctgctt cttaaagctct tgaggaattg aagaatcttc ccatgccaga 180
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tgnacacttc gcagtatcca gtgaanaggg tccaccacat atgaaagttt ttgtcacaat 360
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gtgctgcaga ataaatgctt gaggaactca caaactngtc cgattatact aaacagacct 480
gtggagcccc tntgtgcgta ctagaatnaa acgcnacctc tgtccaagan nagnaagaaa 540
tctgtaaaag 549

<210> 852

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 852

aatacatttg atactcaacc cataacttcc ataaaattta tacatttttc tatatcgacc 60
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gtaacaacta aaatctaacc aatgccatta tcaattgaat ttatacgaat gactttggat 180

tttgaaaaca gtgaataaaa atttatagtt ataaaaatcaa caccttttaa attttgatat 240
 ttgtcaataa aataggcgat aaggatattt tatctgtctt atgagtatct atatcaaaaa 300
 atattccaaa aaccactttt ggaattttga tatttgtcaa taaaattatt attaagttta 360
 ctatttactg gcatttttat taagttatta ttttatgcag acatgtaaat taaaacgatt 420
 ttagcaaaaat attgttgtgc attacatatc ataagattaa tattgtttaa aatgagtttt 480
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 atatttctc 549

<210> 853

<211> 548

<212> DNA

<213> Ctenocephalides felis

<400> 853

ctggatacca tcatttttagt tatgtattca taaaaaatca tattttattga cgaactgtat 60
 tgttgatagt aacgtttagt agcacgatat caagcaaaaat tgaggtaatg aagcagattt 120
 tcctttgggt tttcatattg taggattgag ttcacccaaa tctatatcaa attatttatt 180
 agtatttttc gtagtctttg aaagacgaat ttggaataga tttatattta aatgaagtga 240
 agagaagttt tttgattgcc ttgattgttg aaatcaaaaag ctttctccaa ctagtgagtc 300
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 atttttctac ttcacttgaa atttatggaa aatatgattt taaatgaaaa ttacttttta 420
 ggatgccgcg attaaaaatc gattgaaatc tactctctca attttttatt atgtatatat 480
 ttacttcttg acggagttct atattcaatt cctatgaatc aaaaagttta tatcaagctt 540
 tttataga 548

<210> 854

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 854

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 gccattctac tccctatata aggagaattt gataaaccta atagacattt tacatataga 180
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 gactcatgca ctttattatt ttgagaagga gttaaagtac tcgtcaaatt ctccaacgct 300
 actaagtttt gatgtagaaa aattatataa aagggttctt tgtaaagaga attcagatac 360
 aaccgatctt ggctggatac atatcacaca gatattcaaa aatttaccog cagaatgcat 420
 atctgtaaaa tttgatggca aaatgattca tggataagtt ccgctggaac caactgtgcc 480
 gccagatgta tgtcagagtc cgaattacgc gatgattctg tactcnccgt cgagataatg 540
 atgtctctg 549

<210> 855

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 855

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atagattttt caaatcagtt tgacgttggc gaaaagcaga aaacaaaaat agacgacatg 120
aatgacatga tgtcgacaaa aaacatcatc gccgataagg ataaaaacgaa aatcgacagc 180
aaaggtcttg atgatgtaag catggatgat gacgatgacg acgatgtgat atcagcaggc 240
gacgtttcga aaagtaaatc agaacaatca ctggctcgaa aaccaatact gaccacaaat 300
gattcgccaa atatgcaagt gcattgtatc ttcaatggaa caacatataa gccaggacat 360
tcgttagata aacactgtga aggcatgtgc aaatgttccg aagaaggtct ttggagatgt 420
gagcccaggt gtgaagctct tatgtcacia gactcctgat ggcaccctaa atgatgtcac 480
caccaaaaat gaaaggggtg ccgcgaaatg gccaccaaac aannatgctg cctgtctggg 540
tggcancgt 549

<210> 856

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 856

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tcttgtattt taattactaa aaatgaattt tagcatggat tttaaaagaa atgaattaca 120
aatttgtaat ggatgtattt aagcagctaa ttcgttgaac taaaaatgaa aaaccaattt 180
ttgtcttctt catttatata tgtcttgact cttgatattt gtcattcatt tcaatctaaa 240
ttataatttg ttttgcacia tgaatacaat tataaacata ttataacatt tagttgaaac 300
tacttactac tacaacata actattattt taaaataaaa tatgaatatt ttaaaatagt 360
aattgttgct ctgtttttcg ttaattaaat tttcacatt gaaaaaatat ttgccattta 420
tattttaaatt atgatttttt aaaagtaatg tgtaatttta ttgtattatt tgaatataaa 480
tttattgaat gatgcacata tcagngtcaa ancgogtaag agatcaaaat tatctgcatt 540
taaatctga 549

<210> 857

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 857

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tattgtcatg gatatgtata tatgtcttac acaatgtata gataatttaa catgcaaaga 120
ctcacagaca cctattcaac tgtgtcacgc gttcaaaaat ggaatgaaag aaattgcaat 180
agcttgtgct cattttctag aactctgttt agatttaaaa atcaactgca acaatttgca 240
tacattggac agacatgcaa tattacgata tgcttttaat ttatttccta catttgtcaa 300
attattatac aagggcttaa atgtgcatg ggactcgttc aaaacattat caccttctca 360
taaacaagag ctgcgtcagt atgttattcc tgaggtcagt taaaatatag ttgaagcaga 420
gtcaacatct gaaggccaag ccggtcgaaa gttatttctc gaaataaatg tgattatgga 480
tataatgagt tgctatattg aaatactcac agcaaaaattc ttattaatgc tctatggaat 540

<210> 858

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 858

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catattatta aaatattcat atgtattaca taagatcttt tgtggtgagt gcgtatgttg 120
tatgtatgaa tatcaagagc ttgggttcaac cgatttgaat gattctaaaa tagaaaatgt 180
agaaatatgt agatagtggg gtgtgggtat ctatgtacgt atgtgcggat acaatgtttt 240
gtcgactttt tcaagagctt ggctcaaccg atttgaatca ttctagaaac attttacttg 300
atagaaagat gtaaataagt gtgtgtgtat atttatgtat gtatgtgcgg atacaatctt 360
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tgatagaaag atgtaaatag tgatgtggta tatctatgta tgtatgccgg attaactctt 480
tgtcgcggtt caagagcttg gcgcaccgtt tggatgatct aaaacattta cttgtagaaa 540
gatgtcata                                     549

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<210> 859

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 859

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acctgtgtcg gtgtacacac catccccgat gtccgtgggt attcgcacca ggccatcagt 180
cctggaccgt gaattcgacc gcatccaaag gcgcgtcagg cccaccacct acaaaccagt 240
agaagatttc ttaaacagca gcagcacatt ggactttgac gatgaaacaa gaaaaatccg 300
atctcaagca aactcacttt tgactagaat acacactccc gtacatagac cattgaaaac 360
gatattcttc agtactgctg gaggatacgg atcaataact ccttcttacc ctcatgttga 420
ggaggaatta tcccacatct tccaacctct gagcaactac cgcaaaaata tcggcctggg 480
catttggcat gcgtacgatc cgcagcgaca agcctcaaca agangaatct actaccagaa 540
gnggaaaat                                     549

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<210> 860

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 860

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aatctacgta ctttactaa attggaaaac atgaaagtaa aatattaagc gagttttgta 60
aaaatctaga attaaaattt ttctaagtga atttagtaat aagtataaac atgaagagaa 120
actaaaaaat gccccttaat tttaggaatt ataaaatgta attaatgtga ttgaataatt 180

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tttatataaa aaagctaact aaataactgt agtagatatt attagaactt taagatgtca 240
 atcactcgaa attatgatgc aaatgtatgt aacaataaga atgatatccg acgttttgtt 300
 ttctaaaaat ttgcatcatg atttcaacat ttgacgtaag tgataaaaaa ttcctaatta 360
 ttcaattact gctaattaga aaagagaatt ctcaaacatt gctttttccg ataggcaaaa 420
 catttttctt ttgcaaagct tagatgattt tttaatggac agatgttaat catttctagt 480
 cgtaaacgat aaacgaaata tttcaaataa tttgtattcn ttaagaaaag tcaatataat 540
 gnaattcaa 549

<210> 861

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 861

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 gccttggtt tagctggtga agcaaagcaa aatcagcgta aacatgggca gaggtcactt 120
 caaaatgctg gacacaaagg agctgcaagg aagcaaaata atcatagtgc atcagccaaa 180
 tttttgtcca ggaatcgacg agccaatcga aatgaagagg caacagcaaa tgaggctgtt 240
 catgatatag atcgtgaacc agaacatgaa ggagggtctg aacctgtaga agatcccgat 300
 catgaagtag tcattgatgg tgatgtagaa gatcatgaat ctggtgtcga cggatattct 360
 acaaataatg attatagtac ttacaacgca gaaagtacga atgatgctat tgaagcagca 420
 aaaaagctc tgaacaaagc cattgcctct tcaaacaagc tcgtaaagct ttggaccagt 480
 tggcgaagaa ccttgactta gacgtgcagt tttgaccatg taagttctgg aaaatcaaaa 540
 gatcaacaa 549

<210> 862

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 862

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 caactttgat gatataagaa aatcatgctc tttttattta aatctttagt tataacgcgt 180
 tttttttatt accttaatta tatttaagag ttttacattt attagatgtt ttttggaact 240
 aggacttgcc aaaataaaaaa tcttattctg cattttccaa gatttcagaa taaatttttc 300
 tgaaagctga taaatgttca ataataataa taccaagcag tccttttccc aaataattta 360
 gtaaataatat atttgttgta aataataatt gtgttaaact ataatctttt tttctattga 420
 ggttgtgcaa tgtcaaggac atccaattcc agcaaattcg taaagattct ggcgcatttg 480
 atttgtattt tatntattgt attatattct attgaattaa taataaatgt ttatgggtatc 540
 gatngggcg 549

<210> 863

<211> 87

<212> DNA

T
O
T
A
L
"
S
E
Q
U
E
N
C
E
S
"
5
4
9

<213> Ctenocephalides felis

<400> 863

cacctcgggtg gtgaaagggc agagcaccac gctgaccgtg gccttccagc cggagggcgt 60
aaccgacaag agagagagag aactagt 87

<210> 864

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 864

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agtatatgga aaatacgggtt atattgatga ccaaggacaa ctgagagagg tggagtatgg 180
agcgaccagt ggacgaggtt tgaacccggc aggaaccgggt ataaaagtcc caccaccaac 240
tgtcaacact aaaaacgaat actaccacac cttgaaacca ggcgaagaag atgacggcca 300
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tgcaccatcg tacgctgtcc tcaaagaaag aacttctact ttatcaacaa tgcctccctg 480
ctccagtttc ggaagaccaa aagaagattc taccagctaa gtctcagcta acagcaatat 540
taccacctc 549

<210> 865

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 865

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acggttcgac ggaatcggtt ttcacggtcg tctacgacca gtgtgacgca actgttatct 180
gaaagttggt cgagccttct tcatcggttg acacggcgtg gaccatcgga aaagcccacc 240
taccgctgtc ggccaagcaa caggcccgaa gaaaaaccga tagatactgt gaaagtttct 300
agtaaaatat caaccgccgt tcctgtgaca attacctctg ccttgggaag taccagaagc 360
cggcttgaaa gcaaattattc agcagtgtta gaccgtgtaa aacgtcggga agttatagat 420
catgataaga cattagaacc cagtccattc gtaccacacg cgcaaaaaaa gtgcatcgag 480
tgnatttttag gtgaaaaggc ttatcctatg gagtgcatta gaaccaaagt nttattggat 540
cgcgatgat 549

<210> 866

<211> 549

<212> DNA

<213> Ctenocephalides felis


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<210> 869
<211> 549
<212> DNA
<213> Ctenocephalides felis
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<400> 869

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<210> 870
<211> 549
<212> DNA
<213> Ctenocephalides felis
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acaataaaaa	ggggccatct	cacaattgca	attatataac	tagttactaa	gaatttgaat	180
attatatatc	atagttttat	tatgaaattg	gataacttta	tacaaagatt	ataagattac	240
tttataaata	tacatatatt	taggataaag	ttttttatga	aatgaagggc	tagttgattt	300
ctttggtttg	agatatgagc	cattttgtgat	ttctggtagt	aggctaggcc	agtttgtctg	360
tatgccaggc	agataattat	aatgaaatgt	aacttcaaag	gacttccata	ctctgaagaa	420
tcacgagttt	aatttttttaa	tattttttgt	acgtgtttgc	aataacttct	ttaaaattga	480
cattcaatgt	aaaaacagag	aatagtctta	tataagtatg	atttgagtgg	ctccttattt	540
atatgaatt						549

<400> 871

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gaaataaaatc atctagaaat tttcatgaag cgaactgtgg tgaattgttt tcgtgatatt 420
tgtgatgaac ttctcgtaag gacatatcac gttgtatatt ctagtgcatt ttgaatctat 480
ttaaagttat tatatttata gcaagtaggc acatgacgat agcaatgttt attattatac 540
tcttagaaa 549

<210> 872

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 872

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atggtttagt gtgtgataaa tcaatattta aatttcaagt gtttgtgtga tatatgtgat 120
tagaatacat cgatttgata aagtgatttg ggatcgtttg ggtgcatctc atatgcatta 180
attaaatata aggattgaaa gattttgtat agcttttagta gtaaaacagc ttagtttgga 240
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atgatacaaaa ggtgaatgtt gccagtttgt tatatgccgn nttaaatcac gtaatccac 480
tccccactct ttaagaacaa tacctcaata ttcattgtta cgcacgataa atagcagcag 540
ctantcacc 549

<210> 873

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 873

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aaaggtcagt gtttagcatta tatcctatca aacaataaac gaattagtaa atatcgaagc 120
atacttatta ttatacactt agacttctca atttttaaag aactcatcat ctgtttgttt 180
attataacct acaaacctca aacatgtctg aagaaacaga ttttaacaaa acaattaaaa 240
cggaaccgat cgatgattat cctcaagtga aacaggaatt cgatgattgt gaaaatacat 300
cagatttgta tatggatgat gatatatgtc tgcagcaatt tgaaaaatct gaggttacia 360
ttgacgagga aataaaacaa gagacgattg atgaccaaga tcatgtgact agtaciaaca 420
aactgttcag atgaaaattc ttatattgtg atgaagaggc agtaattcaa gnaattagt 480
gtagtacgaa caaattattg gaaaagttca ggcaaaangg aaccactaat aattggaacc 540
gnttctgtn 549

<210> 874

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 874

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gggctcgaga actgaagtaa atatttttct taaactttca gcttgtttac ggaaatttat 180
attagccaaa ttgccaaatt taataactta gtaaccaatt tgataattta cgttcggaga 240
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tttgattaca ttgtatagaa tttttttctc actatccaaa ttttgccgcc ccaaaaattt 420
gccgcctggc agtagcccg attgccctct gaaatccagc ctggatgngg atatgnatat 480
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attacaaaa                                     549

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<210> 875

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 875

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gtactactgt ctaagacgca cgccggatat atttcatctc ataattttta tttgcatcat 180
ttggtgccca ctgttatata aaactaaata atattatttc tttgactaag caagagttca 240
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tgaagtcttt cactactgct gtctgacact gctcttcacc aggaatcttt ccagaacatt 480
ttaccagctt ttnactactg nttnttttca ctgncccttc ccagaatcgt ctgaaatatt 540
taaaaaagt                                     549

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<210> 876

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 876

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tttttatctt gtatagtatt aagaaaggtg ttttaagatt tgtaagctaa tatagccata 180
tatttccata ccttgaaggg tatttattat aatataattt atacgttag tcaaaacttat 240
gtatacagat aaatttcaca ttatctatta cattttgttt tgttttgtat tatagtcaca 300
tgtgaaaaat atataatatt aaatttgatt tcattttgcc tgtttattgg ttttgcaaaa 360
aaatcctgta cctaaaatca taataggttt cgaaatcaca tacttagctt agagtaatga 420
acttattaaa gaaagaaaaa agctgngtta cttatgggct aatatacgng ngcaaatgta 480
aancccaaaa agntttgctg gaacaattgg ggtgatgnat catgtataaa natatagttt 540
tgaaaaancn                                     549

```

<210> 877
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 877
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 gttatgaaca attatatgtt taagttaaac atctgatatg tataagcaat tttttgaact 120
 cgattaaata caataagctg gtacacaatt cagtacttca aaaataagat gaataaatga 180
 actggttaaa aatgagaagt aaattgtgac tctttgaata tgtttaacgac cgagtgtctca 240
 ccccgttcag tcgatgtgct catcttaaaa tctgctaatt gctataaatt aagttaacta 300
 tagtatgaaa gatctaaaga gttacaaata agagataatg tctgtcgtgg gagaaagacc 360
 atcatcaatg atggtgtcat gacatcatct ggtattggaa atccaagtggt ttaccatgcc 420
 ctatagtgat attttttagaa ttttttgctt gggggctcct acgatgcaa taatatctgt 480
 ctaaagtaaa cattcccagt catcattttt atgaatggtt aattaatggt ataaangatt 540
 tatcttcta 549

<210> 878
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 878
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 aattaagtaa taagagatct ttocatgaat catgtgttac ttttgctgct agaaaaaggt 180
 accagagaaa aggcacgaaa gaagaaagga gttaaagtcg aagaaaaaaa agttggtttc 240
 atcccacata atattcgtgc caaaaataag ttagccgtga gcacaataga caagcatttc 300
 aatgatagct acaaacatgt ttcaagcgac aatgttttca tctctaagtt ttacaaaatg 360
 aaagtttacg attttgcaga agcaatagct gctcataggg aaacacatca tcctacgtgt 420
 acaatgttcc agatgcaaat ctaaagtgtt aaattgacta aacatggctg gtggaaaagt 480
 acccgattat ggataatttc acgantgcat gtaccctgc ttcgtccaat gtgaaagact 540
 ntctngatc 549

<210> 879
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 879
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 tgaagtcaac attaagttaa atagttatta gtctaaaact catgaaaaag tatagggttc 180
 ccattatctg catcaattct ataaatggta tggaaaatga agcttttaaaa tgattgagtc 240
 aaatttgcac tgtaaaaaag aaatgtcgtc ttacatccat atcttcatat ttgacaaaac 300

<400> 882

gttnaaatgg cgcctattct aaaagaagta aagtctcgta aaccttacat actcttgtca 60
gctcgttagga agcgtgaaat agcacatgaa gctaaaaagg aatcttttaca ataccttaat 120
gccaaagcatc cactgtttac tgagaaggat ttggatgtta ccatttgttg ctccagtaca 180
agtgttgaag acgtcgagaa gaatttatat cacacaacac gtgtaaacgt caaacatcaa 240
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gtagaagaac cttcttacac acgtgtaaac gttaaacgtc aaagaccttt taatagcatt 360
aatgaagaac aaagctttgt gctttgtgat aatgaagaaa atgtgggaga accttcttcc 420
ctctcacctt tgcaatgoga actacagaat ctgttaatac ccaaactatg acgccagagt 480
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<210> 883

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 883

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aattatttcg ataactccca ccccgactgg gacatctcga gagtcgggaa gcccctggca 120
aaggctacgg cgattttgtt taaatcagtg tctacagttg aacgggtcca cttggacggg 180
aaacagtggt catacgagat tattatatat ttaaaattga ttgaaacagt gacaaagtga 240
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atggctgaaa tgaccgccag cacgcgcttc aaacaataac accaatcatt ctccaccaca 360
agtgaacaaa ttgtgaaata aaacttgatt ttattccaat catataaact ttaaatacag 420
tgcaactaat caaaataatt tgtcggcaat tgtaaaatac ctaagtgtcg ataagtctat 480
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<210> 884

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 884

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agattctaac gataatcttt tattttgtaa tatgtctgaa gaaggaacaa cgagaagaac 180
tacgaggtcg cttgccaggc ggctgagtag tgattcaata tcgcctccag ctgcagggac 240
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accgaaagca gttagcactc gtaaattccc aagattaagt actgacttaa atttagaaga 360
acctggaagc agaccatcaa cacctatata aactgaaagg cgtcgttctc gccgactaag 420
tattgcttag atgaacaacg cccacaatct gtatcaactc tcccattggg ggagttatac 480
aagaagagga agacatcaat atttttagcaa tgaaagatga tataaataat aaatccggta 540
tgngtgtgn 549

<210> 885
 <211> 496
 <212> DNA
 <213> Ctenocephalides felis

<400> 885
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 tgctaaacca cgggaagaac ccactgagaa ataagttatc aagttttaac attaattatt 120
 aaccaccata tagaatacca tcttgaatca tgtaataatt ttctgattaa aaattctgca 180
 aaactcataa caggcgctga taatcttact cttgcaataa attctttaac tgatatataa 240
 aatgtatcaa gttttgtaaa agaaaaatca ataattattg atttacagaa taaaatattt 300
 attttgttta aaaattgact aatactttgt aataatatgt aattcttata tatatagatt 360
 aaagagttgt tgtagtgctc ttttgttttc aaatagtttt acactaatat atttaataca 420
 aaacgcttta caaattttac aataattgat gaaaactatt tgagatttta ttctogaagt 480
 acaacttatg tattaa 496

<210> 886
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 886
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 ctatacgga ggttctcaaa ccacgacggt ttcccctata ggtcctgatg agttgccacc 180
 gtcttaccag ggaagtctcg ccagtggcgt gcccatggct acttgcaggg tgtgtcaggc 240
 catggctgat atttcaggca aacgcgaaca gcatgtcgtc aaatgcaatc agtgcaatga 300
 agccacacct atccgcaatg caccaccagg caagaagtac gttcgatgtc catgcaactg 360
 tttattgatt tgcaaaagtt catctcaaag gatagcttgt ccgagaccaa attgcaaacg 420
 cataataaat ttagcaccta gtctgtgac accacctgtc ctacaggtgg aaattttcgt 480
 gccaggaatg tgcaagggtt gtgtgtctatt gtgggganog tttttttcaa caccctaaca 540
 atgcctcgc 549

<210> 887
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 887
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 taatttggtc tgtttttata atacatttta gataataatt attggtgaac tcaatcttgc 180
 atatacgccg ctaatgaatt aaaccagcag gcatataatt tttgtactta aatatttata 240
 taactaaaac tgatacgggt tacgaaaaac acataactat attatttatg ttctagacc 300
 cgcatagaatt aaaacgaaaa cggcaaaaaa ttgacgggga tccaaaacat cttttatggc 360

aactgcaggg tcaaaatcct tctacgagta agtcattttc aactttttatt ttttttatca 420
gcaaatacaaa cagggttcaa tgtcaggtga cgggtgaatca cggggtggat gaataataaaa 480
actcatatca tacgcttatt acatataaca ctaccatttt catattatca gtaattttct 540
aggagnata 549

<210> 888

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 888

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attttaatat agcgatttga atagttttta tttatttgaa tattgttcag agtgatactt 120
tttatatttg ctgtaataaa aatgattatt atgataactt atattatgaa agggaaaata 180
tattttaaact tttaattgat taccgaagag gatattgatt tgtatatatc tacttgaata 240
tgaatttgaa cagttaacat tatcttcaaa tttttaatat aattttaaact tattgggttac 300
tagcaaaaac gtcaagatgt ctaattacgt gttgaaagtc aaatcaaaaag aaggacagca 360
tattttaaga gatctcaaat cttccatgac tctggcgat cttttactga aactttcatg 420
ttgacatcga tatctaaacc aatttgcaaa ttttatcggg ttttccgcct aaagcattag 480
atttatctga tnagagtaag actttaaagg ngagtgttt nattcaggag atctgtattg 540
tgaaaaaat 549

<210> 889

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 889

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gtttggcatc agctcagttc cagaatggac gcatcttaga accaccagta cctgcactct 120
gcgcccagg gacgatacac gaacgtagcc cagacggcaa aggatacttc ttctcgtggc 180
gtgaccaca attggctggg gttgaggaag attggttgga cgtccgcaac ttctgtcgcc 240
aacgttgcat ggacagtgtc agtttagaaa ccagtgccga aaatgaatgg atcaagcaaa 300
gaattgtcaa tggaaatgtc aaatacatct ggaccagcgg tcgtctatgt gacttcaagg 360
gttgtgaccg accagattta caacctgttt ccgtaaatgg tggttctgga ccgctgaatt 420
gcaaaaactt gcccaaccac agacagacaa caaaacgact ggtctgaagg agtggtattg 480
tcttctcac cagatacaag aattgaacaa ggtggacaac cgaaactgtt tgcagtttga 540
cactttaca 549

<210> 890

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 890

<210> 893
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 893
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 ttaacaaacc cttttccgta atattgacgg aacctgccta agtgaagcaa aggacgatat 120
 cggttgtcgt tggtagtgta gtgaaactat aaaattgtga ataaaactta aaacatcacc 180
 aaaaataatc cacacacttg cagtaaaca attattattt gtctctatag acagaaccaa 240
 atagaagaaa aactcagctg ccaaatacaag attgacataa ctgtcaatta tttttatgtt 300
 gatcatttat taatatatca attttgactt tcatcgattc tatctcggcc ccccttccca 360
 ccatgacgct ttcggccaac agcaatgcta ccaatcgctt cgggtcgcag cagggacgta 420
 gcctcaatta gccgccgtgc gaatacaggc cggcncagag gatatgcgtg cgcaagcagt 480
 caaacgttgc aaaatcaaag tgacggtgca agagacagct gnagaatcta ttgacagaga 540
 tacgcgcac 549

<210> 894
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 894
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 taaaaaataa aattaggatt ttttattaat atgaaataat aaataatcaa ataaatttag 120
 tgtaataaat aaaagtgtgc atgtgtcatt cttgattaat attcaacgca attaaagatc 180
 aattttgaat gtatcctctc aaaaattgtt gtatgaggag atgactagca aattttttat 240
 aaatgtcgtg gataaatgag tttcgaaaat ttatttttga ttttataaga actgttttcg 300
 aattataata gagggaagag ctagaaatcc acatatcaaa attttaaatg gacctgttat 360
 agaagaaaat gaaactcaac aaaggaacca tgaaaaaacc ngagttctct acaattgccc 420
 ctgtgtcgaa gaagacgatg atcgagtata tctaatttga atcagatcta cacaaatgag 480
 tggccatcct gccatttta tagactcaga caagcggagg gcccttggan ggcagatgaa 540
 attcccant 549

<210> 895
 <211> 92
 <212> DNA
 <213> Ctenocephalides felis

<400> 895
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 gcttcttgta ttcagctttc atatttgccg gt 92

<210> 896
 <211> 386

<212> DNA

<213> *Ctenocephalides felis*

<400> 896

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atatacttta catcgaatct aataacaata aagagttatt aattttcatg tcgatgtttt 60
agaaaatgat tcagtagcaa cttctgaatt ttctttgtta ttgataatac tttctcaaag 120
tataattgca tttcacaaca cacgacggaa atatggttat ggtccatatg aagcaatgct 180
cgttcttcta tccacttgct totgataaat gttcgggtata aagaatgcaa tcactccaca 240
tgctatcaga gatgttcctg atattaaaaa tgttaaactg caattataat ctagaattat 300
tcctacaaca ttgcttccaa caacacttcc taatcgaccc atcattaaag atatacatat 360
tgccattgcc ctgagttgtg taaggt                                     386
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<210> 897

<211> 105

<212> DNA

<213> *Ctenocephalides felis*

<400> 897

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caggcagaaa cgagaccaat tactcactcg aagagtggaa ggcattgaca ttgccaagag 60
aatataattc caaaggacaa atcgactaca gctcttgcaa tatgt                                     105
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<210> 898

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 898

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aagttttcgc agttttacaaa tccagaagag ataccannng caacttcaan atcagatcaa 60
tgagtgcagt tcanaattaa gaatgtctag ttcagagcta acaaagctgc tancgtcatt 120
atcaagcata ttgagcgatc aatcatatat ccaacagnnt cncgatatca acgataccat 180
cactgagatg tcagaagttg aaaattggaa gtcacaaaca aatgccangt catcaangaa 240
tggcacgtca naaataantn tattaaattc tttttaaaat ttatgtatta nttaaattgt 300
atgtctaatg cttcatatta ntattaagtt ttcaaatttt tatgttnttt tttgtactgt 360
atnaagagtt tacttanttt tontagtttg nnatacctgg gtaatttgta cctattnang 420
aagcttaagc tcgnngaaaa ctanncctta ccnntatcag tgctangtat tttnacnnca 480
annataacan gcttngag                                     498
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<210> 899

<211> 359

<212> DNA

<213> *Ctenocephalides felis*

<400> 899

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cgtcaagtcc aatccaagag tggaaaacttt ttcaggaaag ctactagaga ggtgtcattt 60
ccaccagtgg gatcgagaaa taatcgacaa attagctgtg ttctgtccct ggaccaatat 120
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ccttacttan caatctcact tttgcattct tgcgcgggtg gcgtgggtan gcancgcaac 360
 tccgttttat caaagtgcaa gccanttgga caatcanaag ntttatttgc canttggttg 420
 ttaaccaagn nmccattgnt aacanttttt acantctctt cgatnngaaa aaaacgtttt 480
 cacctttgca tgcagttc 498

<210> 903

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 903

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 aactattatt cttaaattaa agggaaattt tacatcagta cattcaacat gaatcaattc 120
 taaaattatg tgaataacca aaatttttaa ccattaacac aaatattttt tattccact 180
 taacttatta cttaataaaa tattacttgg caagtatttt tatatttttg tttttttta 240
 ggtatattat aaagacgcct ttagttgttg ccttatgaat aaaatacata tttataatac 300
 attcacatat tacatactaa actattgaga agacttagac gatttaattg aattaatatg 360
 aaggaattta ttaattttaa ttttataaat ataaaaaatt ttagtgcttt ttttangata 420
 tcctangtta tattanaatt cgttttcatt tacagatgtg gcatatangt atantttttg 480
 tnanttaatt ttagtttatt 500

<210> 904

<211> 440

<212> DNA

<213> Ctenocephalides felis

<400> 904

antaatttta aaattaatct ttcaagttat tctgaatcgt ttgacagaaa aaaattttaa 60
 aacatgtttt ctgtttttac taaaaaatgt cgttattttt tcaatgaata ttgaaagtgt 120
 ttccaaaaat ttctaagtta atttaattaa ttttttaatt atttttattc agatgttgctc 180
 acacaaaact atttatatat catcataatt antttgtata ttttttctat gataaacctg 240
 taaattattt ataaaaagaa gccaaaaaaa agaatttgta gtgaaaaaat atttcaaatt 300
 tgaaacacaa actgaatgtt ctgaatgtta attatatgtg attaaaaata taaacattta 360
 ttgaaatatt aaaaaannnc aatacaaat atggttagata gtagaancca anngcataan 420
 aannancna aaaaagcttg 440

<210> 905

<211> 494

<212> DNA

<213> Ctenocephalides felis

<400> 905

tttttttttt ttttnntttt ttttttgaac ggcccaaacy atttattttt antaaaaaga 60
 tacatgtaat ttcataaagc ntctatattt ananatttta aataatcagn cattacnatn 120
 gttnacgaca ttttgtntgt gtccttaca tngaatacaa ttttanacat tttaattttt 180

atncatattt tttatattta attgcacaga tcatttgtgt atttantata ttaattgact 240
 actttatgat aatttgaatc cnaattaatc tattcaagat tgnnttcctg gnttaagcct 300
 tacttagcaa ncncactttt gcattcttcg cgggtggcg tgggtatgca tcgcancncc 360
 gttttatcaa antgcancnc gatttggnc atcataatgt nttatttncc ncntgtngnn 420
 nccccagaa ncattgntca nacttttnac aancccctcn atngggaaaa acctttcact 480
 tntgcatgca cttc 494

<210> 906

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 906

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 ggtccgcaat tatgacgtaa cggatcatat gcaaaatttg cggggcaata atattgggtt 120
 cctatactat tttogtcaca ataataatag ctttgacaat catttatatt tggataaaaat 180
 ctcgatggtg acggacattt gaaaccttgt actttgcana ctgtactttc tttagtgggtg 240
 cactgtagat atccactttg atcagcgcac acttgatctg ggctacagga ttccttaacc 300
 ggatctgctc ctatttccgg acaatactgc atttcgggtg aactgcacga attcacgcaa 360
 ctaaatttta cttttttaca tttttgctcg ggtttcggtg cangtgtacg ttcangagta 420
 gtactactcc tgggtgcgggc tcatccaatg atgcaaatac ttctttattt actgttaaan 480
 gcgttccgtc gacattaa 498

<210> 907

<211> 215

<212> DNA

<213> Ctenocephalides felis

<400> 907

agactgaccc tgggcccagg cgtttgctta acagtgacgt taaagacgac caaccacagt 60
 caacgaatga tgaaataagc tcatccacaa ctgctccaag ttcaaacgtg aatgaaagca 120
 atggaaacct caccgaatca caacccttaa gccaaaatac ttcaacaaat actccattag 180
 aaacatcaaa tacctcacta gcagaaagca gcagt 215

<210> 908

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 908

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 ttccctcgccc gcaacgacat agtcgttttg caagatttat ccatgtataa ttttcgccat 120
 tcgtatccaa aattctcttt ggatcttgat catgttaaag ttgctttaac ggcatgggt 180
 cgtatgcatg caagttgcat tatctacgag aagaaaaaaa attggtgcat ggggagagtt 240
 tacaaagatc ttatgttcga gactatggcc aacaataatc aatggtggag aactggtgag 300

gatactgctt tagcaattgc tgaggaatct gagaaattcg gcaaataac cgaataccat 360
 tccatgggtcc aggagaagtt aattgatttc ctgagattgg catgggtctat ggtaaaacca 420
 tcgcgcattt ataagaatgt ggtatgccac cgcgatacgc gcaatcaciaa tttgatgttc 480
 aaatataatt caactggt 498

<210> 909
 <211> 245
 <212> DNA
 <213> Ctenocephalides felis

<400> 909
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 agacaaaaac ttttgtggac cttcagatct atctgtgcgt tgcaaggaac tagatgtatg 180
 aaataaactt cccctaaata atgaagttat tttgctattg attagcataa gtttaagcact 240
 ctgct 245

<210> 910
 <211> 386
 <212> DNA
 <213> Ctenocephalides felis

<400> 910
 cctacacaac tcagggcaat ggcagtatgt atatctttaa tgatgggtcg attaggaagt 60
 gttgttgga gcaatgttgt aggaataatt ctagattata attgcgattt aacattttta 120
 atatcaggaa catctctgat agcatgtgga gtgattgcat tctttatacc gaacatttat 180
 cagaagcaag tggatagaag aacgagcatt gcttcatatg gaccataacc atatttcctg 240
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 gaagttgcta ctgaatcatt ttctaaaaca tcgacatgaa aattaataac tcnttantgt 360
 tattagattc natgtaagat atatgt 386

<210> 911
 <211> 66
 <212> DNA
 <213> Ctenocephalides felis

<400> 911
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 gtctgt 66

<210> 912
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 912

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tcttggttaa caacaaatgg caaataaaac attatgattg tccaaatggc ttgcactttg 180
ataaaacgga gttgcgatgc ataccacgc caccggcgga agaattgcaa agtgagattg 240
ctaagtaagg cttaaaccag gaaaacaatc ttgaatagac taattaggat tcaaattatc 300
ataaagtagt caattaatat aataaataca caaatgatct gtgcaattaa atataaaaaa 360
tatgtataaa aattaaaatg tataaaattg tattttatgt aaggagcaca aacaaaatgt 420
cattaactat agtaatttct gattatttaa aatatataaa tatagaagct ttatgaaact 480
aaaaaaaaann nannnann 498

<210> 913

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 913

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ggcagcttga aggacatctt tcaagcaagc tctggcttca tcgacatcgg ctgcggtaac 180
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ggccaagcca ttttggcgaa cttggttgaa ttctcacgt ttatcatccc tgcaagcctt 300
gaccttagca cgagcttctt gtgcaaaacc tagagctttt tgggtgttggc ctttaaggca 360
ttccttttgc gcttcaactca cttttttgct aagtttcctt tcaacttctt tgttgaacct 420
ttccaaatct ctatcgactt cangggcaaa tccttggttt tcgaattcag cagcaatcat 480
ttaattttgc tatcntgg 498

<210> 914

<211> 123

<212> DNA

<213> Ctenocephalides felis

<400> 914

tcttatgatg tagtcttaaa taaatgacat tattttctatt tcataaaatg ttactaagat 60
tgctcatatt ggtagaaga tttaaaaata aatcagcagc aagataaatg aattctgtaa 120
tgc 123

<210> 915

<211> 190

<212> DNA

<213> Ctenocephalides felis

<400> 915

aatgtcattt gttttcaaact ccgtagctat tttagctgct tcagctgatg attttgccac 60

accaaagtga ggtgtcggta tgccaccttc ctgcaaaatg ctgaaggata tatgctccaa 120
gacattgagc tttcgtgttt ggggtgtttg ccatgggtgct acggataaaa tcttaattcc 180
atTTTTTcgt 190

<210> 916
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 916
TTTTTTTTTT TTTTTTTTTT TTTGCTGAAC TATAACTTGC TCTTTTATTG CTCATCATAT 60
AAGGCTCAAC AGAAAATCAT TATTAATATT ACATATTTTT ATAGTGATT CATTGATATA 120
ACCTTACATC TATTTTTTAA TTCATTTAAT ACCTAGTGCC AAATAAAAAA GTTATGCATA 180
TAAGTGTTAA CAATTTAAAT GTTACATAT AGGACATTTA CTTGAGGCCA AGTTATATTG 240
ACAATATTCA GTTGATGCAC GAATAAAATA AAATGATTTA ATTATAATCA TTCTATTCGT 300
ACAACGATTT TATACAATCA ATCTGAAGCT ACAAGCTAGA ATTATATAAA TACATTTTAA 360
TACTATACAA ATATNCAGAA ATATTTTCATC CTCATCGTCC TACACAAATN CANCCTAAAA 420
TGTCTTACAA GGACNGTCAT ATATCACGAA AGGAATNAAA ATTANGAAAG GGATTAATTA 480
ANACTACATT AATAATACAT 500

<210> 917
<211> 95
<212> DNA
<213> Ctenocephalides felis

<400> 917
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GAGTTATATT TCAACAGCGT TCTGCAGCAG TGCCT 95

<210> 918
<211> 68
<212> DNA
<213> Ctenocephalides felis

<400> 918
GAAAGGACCA TTAATTTATA ATAATTATTT TAATTTGAAT AAAATTAAAA AAAAAAAAAA 60
AAAAAAAAA 68

<210> 919
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 919

ttttctactt tcgccgtcaa gttttataac gactgaaaaat tcaataatcc aagtttaatt 60
 gggttatattt ctttttacag ttatagataa ttctataata agtattgitt gagtgctaag 120
 tcagttttcta ttcttgtttt tgtgtgctgt cgatgtcgat atcgatagag ccgcagacct 180
 tatcaatttc acttatcggt atgtgaaact actttgattg agttagaatt tgtcactgag 240
 ctttatcaag gtcttgatc atgaaaacag atcggttgcg aaataactgg catagcattc 300
 tgacacaaaa atactagaat acctactcaa aacgtctttt atgaccgtgc gatgaccttt 360
 gaaacgaacg ttcattagta tccgtatata cgattgattt acttttaaca cgtttaatta 420
 ctacagaagt aatatcaaac gaacggctnt cgctnaagtt tatatgaagt aagaattgta 480
 acaagcaaag aagtataa 498

<210> 920

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 920

ttttttttta attntttttt tttttttttt ttactttacn anatatgttn gtattacaca 60
 acatttttagt tgcatataca agcttaaaat ataaatatat attatnaatt ttagttaaaa 120
 aatctaaatg ctaggtaaag aacctantac cgaagtantt atggattcga atataatcna 180
 agaaatanat ctaaaggcat ttgtatcatt cctgcnataa tttgtantga aataggnaat 240
 aaatattcca caacanant aatgtattaa naaacattta cgtttggtca nccattcata 300
 acaatctana tanttcaaaa taataaattt tacaggacca aatacatnaa gcggtcattt 360
 ntgtngnant gcacnaggaa acacacatat tcaattattg cgccntgttn ctataataat 420
 ttttgngnnc nttntgcnac ttattaanca anatttgnga gatantattt ttcgtttctt 480
 ttttganaca ttttttacag 500

<210> 921

<211> 173

<212> DNA

<213> Ctenocephalides felis

<400> 921

tttcttttagt ggtgcactgt agatatccac tttgatcagc gcacacttga tctgggctac 60
 aggattcctt aaccggatct gctcctattt ccggacaata ctgcatttcg ggtgaactgc 120
 acgaattcac gcaactaaaat tttacttttt tacatttttg ctcgggtttc ggt 173

<210> 922

<211> 217

<212> DNA

<213> Ctenocephalides felis

<400> 922

cccttcagta tttctttttat tttcaattac gaaaatcaga aaacagttat tocaagatca 60
 tggttcttgt tcccttcttt aagtttattt cctatcctaa agtgtttaact attactacct 120
 aaactgcgat gatatttgtg atgaatgatg ttgacatgat gtccgaagac gttgggctaag 180

atgcggtaaa attctgttcc tggatcatcat cgttccc

217

<210> 923

<211> 269

<212> DNA

<213> Ctenocephalides felis

<400> 923

agatctacta atgccgcgtt taccactgtc acagcaattc cgcaaaccag caaccacaaa 60
tataaatatg atgctattgt taaatgttca ataaatgcac aaattattcc acaaattccc 120
catgagacca tcacgaatac aagaattgga agctttccca cagagttaat aatagcacct 180
attatgggaa atccaatcgc atatccagct tccaacatta aagaatgcat aaatgcctgt 240
tcttccattg tgtctttaca ctcggtcgt 269

<210> 924

<211> 303

<212> DNA

<213> Ctenocephalides felis

<400> 924

attananata cgctgagact ttaacctant tatagacata gaanatataa ttcttanata 60
ttaaaacctt ananacttac tntataaatt gtnatttaaa aacagggtga atataaagta 120
taaataatta tagaagattg atttccntaa cagtgagtgt tatgttaaaa atatataatt 180
aatacatgaa atggacaatg tttcanttat tganacgaac ttcttgacta tgtctgcaat 240
cgatgactgt gagttatata taaaagtttt cttnataact tacgtgtata tatataagta 300
tgt 303

<210> 925

<211> 145

<212> DNA

<213> Ctenocephalides felis

<400> 925

cnttacgcct tcagtgtgcc ggaattcggc tnancgtggt cgcgggcgcg gtacgaaagg 60
accattaatt tataataatt attttaattt gaataaaaatt aaaaaaaaaa aaaaaagaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaa 145

<210> 926

<211> 428

<212> DNA

<213> Ctenocephalides felis

<400> 926

taagtgtgcc cttaaattctt tcaaggctcc ccttgccgat tttccgactt cacggactaa 60

gttgcccaat tgggaccagg tttctttgag tgccttgcc aagtcttttg ctcccttctg 120
ggcagcttgg agaaccctt tcaagcaaac tctggcttca tcgacatcgg ctgcggtcac 180
aacgcactcc ttggcttgtg ctctgagggc ttcggcgttc tccctggctt ctctccaggc 240
ggccaagcca ttttggcgaa cttggttgaa ttcacacgt ttgtcatctc tgcaagcctt 300
gaccttggca cgggcttctt gtgcgtagcc tagagctttt tgggtgttggc ctttaaggca 360
ttccttttgcg gcttttttgc taagtttctt ttcaacttct ttgttgaact ctccaaatct 420
ctatcgac 428

<210> 927

<211> 118

<212> DNA

<213> Ctenocephalides felis

<400> 927

catcaccgag aagaactctt cggctacgga atatcttcat tggaggcgcg ttgttgggtgc 60
acgcagcatt aacaagggtc ttgcaattca gcataatgac cagaagaaaa atacaggt 118

<210> 928

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 928

catttgcaag aattatcagt gtaatccaaa aacaatcctg tccgcacgca agcaaagggt 60
tgcgatggtc ctggctcctgg tggcggtggt ggagggtgcag ctgtcgccaa gcactcggat 120
aaaggcgctt gcacgcattg tgggtaaagc gcgctgaagt atgtctgtcc ggcgcatgta 180
aaacgaccca cgttgaaatt tcctccagag agtctcacac attcaaaata tactttgcat 240
gttttgtctg ctggatctgc aaatgagccg ctctgcacgc agctgtatat gggcggcggc 300
gtagggtggt gccaaaggcg tggaggattt cttaggcact ccgaaagggg agcgaccaca 360
cattgctgat agaagtaagt agaaccaagg acaattgtaa cgcgctacac tgaatcctcc 420
gcctgctttc aaagcacatt tgtagtatcc tttgcaagt ctgtcatagg gatctataaa 480
catcccttc 489

<210> 929

<211> 409

<212> DNA

<213> Ctenocephalides felis

<400> 929

gactcgtaat tatatattaa gtcagtttgg agaacatact aaaaacacta atgatataat 60
cgtaagtgaaggaaattct caataaatgg tgaaattcta gctagtgcag aggttaattt 120
aggtttggct atgtcacagg aaaagttttt aagtattaat aatttcattt tgatattaca 180
agaaatatta ttatctgtgt tgtttaatga tgataaaggg aatcacattg tatagatttt 240
caggaaactgt caaatgacag gcaaagtata atcatgatta atgataaaat tctaaaaagc 300
aaagggataa aacaccctta atgtgcactt gcttattgca tttgactatt ctgaaagaga 360

tgtcaatagc taatgtctta ttgtagatgc tataagaaaa ctattaagt

409

<210> 930

<211> 349

<212> DNA

<213> Ctenocephalides felis

<400> 930

taaaacgaac tctagaatat tcaaacttag ctggagggtga tacttccaac atgaaatata 60
ttgagctaaa attaatccaa agtaaaaaag atatagaaga tccacaatta tgctgtaaag 120
ctgaggtagt atcttgatat gtgaagttct tgaacataat tgtgttctta aaaatatgaa 180
aatttgtgta tttatattta aagtcaactt attttctaaa aattacgata gcttataatt 240
atgtgttatg tgaatatgat tatcaattgt taaatcaatg tattctttat atgttactat 300
tatatattat taaattaana aaaananaan naaanaaaaa aaaaaaaaaa 349

<210> 931

<211> 382

<212> DNA

<213> Ctenocephalides felis

<400> 931

taaaatcttg tggagaagaa tgtgtcattg cgatcaaaac caacacagcc cttgataaat 60
aatgtatttt tcaacacatt caaaattaaa atactatgag aaccaattca aactgtttta 120
acaagtttga caaagttgtg tcgttgataa tcttagttga tgtattgtct attaaaatcc 180
tgacacttca agcattgttt atgaatatat tgatcaagaa tacaaggttt ttaagttctc 240
tctggaatat tttttgttct tccagagatg tttaattgac agttgtcaat caattggggt 300
tttcatagac atacattgta acagtatgct tgttttaata aaatcaatca aattaataaa 360
tatccatgat tatgaattaa aa 382

<210> 932

<211> 313

<212> DNA

<213> Ctenocephalides felis

<400> 932

aattcttggc tataagtctg ttgcatgttt tgcaagtgat ttgtttattg catttattcc 60
cgtggcatat ttacatgaa tcagagtttg cattacaatc gttaccctga tctgatttgc 120
atcctcgagt aatgacacct ttttcaattt ttgaatagca gtcgtccttt ggattcatac 180
aaactttggc cttogtcttt cctgcatctt tgaaacattc gtttcttagt tctggaagtt 240
tttgaacgtt acaaccgat ttctcgcaac acattttttc tcggttagtc gagtcacaac 300
tttctttaac cgt 313

<210> 933

<211> 85

<212> DNA
<213> Ctenocephalides felis

<400> 933
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gagaaaagtt gccaaaggaa tttgt 85

<210> 934
<211> 446
<212> DNA
<213> Ctenocephalides felis

<400> 934
gaggagactt tgtttaccgt aatggacaac cattcgaaat tccaaaagga aatttactat 60
tgaatgatta aatgtaatag attaatacaa ttttagatta ttaaaattgt tctattacta 120
cagtagcaac ctcagcctga aaattaaccg aacaaatttc taacccttat caatgtatag 180
attttgaaaa ataacataga aatactattt ttttgatgac tgtaataaaa aaatgtataa 240
atggccatac ctgaaaagat ttctatgtgt attttttatt accttttatt gctgaatgga 300
taaaagataa atacaatttc ataagctctt ggattaaatt aattttgaat aaatccataa 360
ttataaaaata tcaaattgaa atatggaact acaaaatgta tacgaaatat aacttatata 420
ataaatgana acnaatnntg ccgncc 446

<210> 935
<211> 491
<212> DNA
<213> Ctenocephalides felis

<400> 935
tttttttttt tttntttttt tttnttttg tacancatat aacgttatat ttogtataca 60
ttttgtggtt tgtggtccat attttaattt gctacttaac atattctatg attatggntt 120
tattcaaaat taatttatcc aaacagctta taaaattgta tttanctttt atccagttca 180
acaataaaat gttaacanaa aaatacacat aganatcttt tcanacatgg ccatttaaac 240
attttttcat taagggtatc aaaaatatan caggcatggn catttataca ttttttttag 300
tatgagccan canaaaaata ntanaatttc natgttanta ntcaanntct anacantnan 360
anngatgtta aaagttaatt ttcangcaga agttgctact gnactnatnn aacaattttt 420
tcatccanaa ntngntnaac ccacnncatt taatcatcac nantaaattc cgnttggnat 480
tncgantggg t 491

<210> 936
<211> 323
<212> DNA
<213> Ctenocephalides felis

<400> 936
aggatcaagag atagatataa atattttttta taaatttctt ccttggtatc aattanatta 60

[illegible]

<211> 386

<213> Ctenocephalides felis

agгнаатggc	aaaaactgtg	tctagaactt	tgaaaaccaa	aatttcattt	tacttattaa	60
cgttttcaa	acttttaaatt	ttgtttttat	ttatcaatcg	atcaattttg	tctttctttt	120
ttgtcttgaa	acaattttaga	gacactgtaa	tttcacctag	cacctgattc	tgtgattaca	180
ttataatttag	aatatttatca	cgcggattat	taacacaatt	tcatcgtgaa	taattaatat	240
aacactagaa	tacagaagac	gcacgtgcat	gtatttttaa	atcatacacg	cgacaatggg	300
gggtggttta	caccatctga	atccggttca	acaccggatc	aggtgagcgt	ctttgctaac	360
cattaaagg	tggaacaagg	cggggg				386

<211> 385

<213> Ctenocephalides felis

tttttttttt	tttttttgcc	ttagcatatt	tgcgagcctg	ngttcaacca	nantattttt	60
ttatataaca	cataaagnan	ancaaagtan	atatttttga	tagtttcttt	tgtngagnac	120
ttcatcaata	tantaatata	atttangntt	cctcncgcan	gttcccgtgt	tgcancnttg	180
ngtatcttgg	ntaaataatg	ttncaatcgg	acattgntca	ggancnggnt	ccccttttagg	240
gcgtaaacac	gtgaaaaact	tccggcatgt	tncgtnngtc	tnnaaancac	attttccacg	300
tnctcngnna	nangtttctc	tccttgggga	aaactcggcg	ggttcttctgc	attgcaatac	360
qgctcncnctt	ccagcaatnc	atacc				385

<211> 489

<213> Ctenocephalides felis

ttgatagaca	gatcagtcgc	atcaattgaa	tcttgagcta	ttttgctcaa	ttgactat	60
tgctcaattg	gaactgactg	aatagacgga	attccttcaa	tactttgact	tccaattcca	120
tctocaagaa	ttttctctaa	tttttgggtg	aataaggaac	ttctaattga	cgctgagtca	180
gaatttttat	ctctgagctt	tacagaacta	gatcctgtat	tagttttatc	agtttcgggt	240
ttataacaat	catcacattg	agaattcacc	agtcctgcag	gatcaactat	ttgaatattg	300

tcattacagt gagctttatc atcgttgtct ttgaattctt cttttttgat atcgatttca 360
 ttttttagttt cgggaaaatc tttcagcgct cgcgcacgta gtaagctaga ttcagtggaa 420
 gatattgaac tacttctaatt tgatttaatg gatgagttat tgctttttga agagcttttt 480
 cgaagtcca 489

<210> 940
 <211> 478
 <212> DNA
 <213> Ctenocephalides felis

<400> 940
 gttcattttg tatgaaactt tcagtaagaa gtaaggatc cttttgtgaa tttgatggtc 60
 tttctttcac tgatccaaat attggttctt cgcgattaat atcaacattt aattcttttt 120
 gttcattact tgcacgggtt gttgaagtag tgattactgt attaatatct tgcaccgtgt 180
 taatatcttg caccgatgat gctatctctg gaacattgct aatatcttga ggttctgaaa 240
 cgtcttttga tcccactgtt ggttcacatt tagtaaattc caaagtaaac tgtgtgacgg 300
 gtttcattcg tataacttcg tgggttatga gacaaatctt ttgagttttg ttttcatctt 360
 taggaaaatc gtgtgaaatt gatacgtcat aaatatcacc aacttttctt gcaacttgcg 420
 atgtgtttga agtcgttata gcnttcgagg tcttcatttc attgggatca atagaagt 478

<210> 941
 <211> 139
 <212> DNA
 <213> Ctenocephalides felis

<400> 941
 ttaaagagga tcaacaaaac atggaagacg aatcggtagt aactaatgtt cgatctccgc 60
 cgactgggat ttggcaaccg attcctaatt ttcctcaaatt gccatggatg ccacaacaga 120
 tgatcagacc gacttttgg 139

<210> 942
 <211> 390
 <212> DNA
 <213> Ctenocephalides felis

<400> 942
 cgattttttt gtttaatttt ttgcaaaaac aaaagtcagc cactttcggc gtgcatcatt 60
 tataaatgat tcgacaaaata accaaatttc tcgaagacgt ctccgcgagt gcgttaaagt 120
 tccaacggga attctacaag gcaaaaatcga aagagttcag gatgctcctt cagcagatct 180
 cgaggagcag gcaggggacg atttttaaga aacaaccggc tctgtggtgt ctggtcggat 240
 gtctagtagg tggtttttagt ctggccactc tcagcctggc ccgcaccgtc aagaatcacc 300
 cggacgtcta cctgatccgc agccactcgg gogaggagcg ctactggcgc cgatacacca 360
 aactaatcga cgtcagcgga tcgcgcaagt 390

<210> 943
 <211> 274
 <212> DNA
 <213> Ctenocephalides felis

<400> 943
 acatanacta atgcccgcgtt taccactgtc acagcaattc cgcataacca ncaaccacaa 60
 atatanatnt gatgctattg ttaaagtgtc aananntgca canattattc cacanatctc 120
 gcatgatacc atcacganta caacgaattg gaagctttcc cacagnagtt aataanagca 180
 cctattatgg gaaatncaat cgcatatcca gcttccaaca ttaanggaat gcatagnatg 240
 cctgttcttc cattgtgtct ttanactcgg tcgt 274

<210> 944
 <211> 598
 <212> DNA
 <213> Ctenocephalides felis

<400> 944
 tttttttgca ataaaaacca gtaaccagtg gcacacaaat ttgtaatggg catgtttcat 60
 tatgatcgat cgtattttat attaagagca attacattat taattaagat attacattct 120
 cttgaattac ttcttattct ttggaacctc taaaagttct tccagtagtt catccatagc 180
 ttctatcaag ctagtagcat aattttcatt gttctccatg agatccaaaa cagtctgctt 240
 tctcattcca ttaacagtag gatcaaactc ctccagaatcg tggntcaaaa ctgccagtat 300
 ttcaggaggc atttgagtaa gaggcaatgt catcacgccg aaaatttttag cgcacaaacg 360
 caaatcatcc gtgctancat caaactcttg ttcaggaatt atatcgttta catccaaatt 420
 ttccntcgta atgtttttcca caaatgctgc tctgtagaac ctcttcaatc ctggtagngc 480
 tgggtctctaa agctccanat gttgtcgata tanaagatga ttgnatccan agctggtgga 540
 ttgttgtgca tcttggantc gncaagatgc attgtnaagt anacanttgn ataganct 598

<210> 945
 <211> 167
 <212> DNA
 <213> Ctenocephalides felis

<400> 945
 ctgcatacca gtcagactgt ttaggtgcaa gtgtcaactc ttccccatcc ataccatcct 60
 taccatcctt accatctttc ccaaccttgc caacatcttc cccaacagca ggatttcctt 120
 ttggccgaaa atctcttgat atgcaaacaa aaactggaac taaatgt 167

<210> 946
 <211> 160
 <212> DNA
 <213> Ctenocephalides felis

<400> 946

ttatttccca atgcanatgc actgctgggtg atttgactcg tatggctaca attggtgccg 60
 acaaactagg tgcccaacct gggtgtccac caattacagc tttgaccttc ttgcgtccat 120
 tacatgccat gtttangcaa agggctctgg aattgggggt 160

<210> 947
 <211> 193
 <212> DNA
 <213> Ctenocephalides felis

<400> 947
 cctattccgt cacctacgcc tctgtcgaag tcttacaaga ttctgaggtt ggacaggctt 60
 tcatcgtctc cggaggaatc ggccaatctg aaatccattt ggctgttgta gctgacaaaa 120
 ttaagcaagt ccaatatacc tacgaaatct acgccattgt ctacgtttaa aatccttaaa 180
 tgactgaaat tgt 193

<210> 948
 <211> 413
 <212> DNA
 <213> Ctenocephalides felis

<400> 948
 acacaattag caataggaaa atctagccac aaatattttt aacaatttat ttaatactta 60
 tgttctagaa atacaaagtg taaagttcaa ggtttgtata gcttaataaa gtaaaccattt 120
 taaaatgtaa tgaatttatc tgcaaatagt caaaatcaaa attactatat aatgattatt 180
 gaaataatgc ttttatagat tgcaatttcaa tctgtattaa attgtatgta aatcacagca 240
 caagatctaa cacacaattc atctaacaga aagaacaaaa taatttttaat gttattaaaa 300
 attacatata aaataacttt tacaataaag taaccttaca tgagatgtgt tgatttcaga 360
 tacttttcat acaacagtgc tttctgtata aacaatataa tatanataac ggt 413

<210> 949
 <211> 237
 <212> DNA
 <213> Ctenocephalides felis

<400> 949
 aaacctatta attacaacaa ttacactaaa ttaaattaca attaatcoot aaactaacia 60
 attcaacttcc acgtgtctgt caaaaataaa atcactcaca aatctttaag caaacaccat 120
 gacaagttca ctcttgatga caaagttctt atcttttatt tacaattgtc tttgcacaat 180
 aatggnnttat ttaattttaa tcactttgat tgatttatgt gatgttcttc atctgggt 237

<210> 950
 <211> 131
 <212> DNA
 <213> Ctenocephalides felis

<210> 954
 <211> 429
 <212> DNA
 <213> Ctenocephalides felis

<400> 954
 aagagtatct ttcgaatgca atcaaggatt tatcctgacg ggagatccaa ggagaatctg 60
 tctcgatgat ggctcttggg acgttcctgt ttatggatat actgaatgtt tacgtgaaat 120
 attttacact actcgctcag catggttaac tgccggaatc atctttgctg ttatggtacc 180
 tcggccgcga ccacgctcga gcggccgcc ggcaggtac ggaagcacct taggctgtgc 240
 aggacatgta actgtatagc attttgtgcc cagagccata ggtccgcaat tatgacgtaa 300
 cggatcatat gcaaaatttg cggggcaata atattgggtt cctatactat tttcgtcaca 360
 ataataatag ctttgacaat cttttatatt tggataaaat ctcgatggtg acggacattt 420
 gaaaccttg 429

<210> 955
 <211> 296
 <212> DNA
 <213> Ctenocephalides felis

<400> 955
 caaantataa gataccggaa acatttanat aaacgatata tgaatattta atacatcatn 60
 aaaaagaatt tattaataa anagaaantg gngatctacg tcaattttatc taaaatagtt 120
 tttaggtgta anaacnatta gaactaattc tatttgttta ctacttttgt tnctcgtatt 180
 taggttttgn tttaaattan gtatgttatt ttagaaagca ctgataagta taaggnattg 240
 ttganctgta ttttanaaga ctgccangca antcacgttt atttannnaa naangt 296

<210> 956
 <211> 221
 <212> DNA
 <213> Ctenocephalides felis

<400> 956
 gaacaatata gataccaaaa tcattttgaa cgagatggaa cttgcgcaag agctcacatg 60
 gaatcttttag ttgatggtaa aataaaattc agacatgtca tggaagaaaa tggaaaaaaa 120
 gttgaattta gtggacaact cagacgtaat gatgaacatt ccggtaatgg atatctgaga 180
 atcagttatg aagatacaaa tcgagaatca gattatatag t 221

<210> 957
 <211> 126
 <212> DNA
 <213> Ctenocephalides felis

<400> 957
 tggcactgct tttcatcata atacagtcac tagcgatgac atggatttct ttatcatata 60

ttatccaaaa taggtgtgga taattccaaa cccaagccct cctcatgtgt gtcaatacct 480
ctgtatgatg tgcttaaa 498

<210> 961
<211> 414
<212> DNA
<213> Ctenocephalides felis

<400> 961
aaatggaata acactataat ttctgttaca ttatagttaa agtgtaaaaa aaatgagtga 60
aaatatggcg tcccatattc cttacaataa ttggntcaact tacaatcagt tataacatct 120
gcatacaaaa tgtnggtatt tcaattttat acatacaana caaatttcat ttacaatttt 180
acgtagttaa tttattaact aattgataat aaaaaccctt ttaagacaca aaaatgtgtg 240
tgaaatttan ttaatacanta tgaaaatttt taaatcttta ntgttaacan tgattttttt 300
ttaaatagga acancttaan gcaacattga gaaaatcttc gacngctatt gttatggttc 360
ctgtttgttg ggaatctcgt tgtctgaatg cttcctgtga gcctctgtat ttgn 414

<210> 962
<211> 234
<212> DNA
<213> Ctenocephalides felis

<400> 962
aaaagtgnnt taccatagan gtttgtgaaa gacctgngtg tcctcaacgc tttatcagac 60
aaagtcttag aactaacccc tgatgaacgt cctagcttat tcttcttccg cttancanta 120
aatttcaaat cccccgnaga aancgnnaaa nccaanactg aactcaccaa nggcatcaan 180
cancttgagc gaagccttcg ataaaaccta nanaggcaaa gtgctgttca ccgt 234

<210> 963
<211> 379
<212> DNA
<213> Ctenocephalides felis

<400> 963
taacctccaa tgacgtctta acacgtaaaa caaggcaagc agatgatgcc ccaaaagaac 60
ccgatttcaa cctagctaaa gaatacaacg actcctaccc ggtgggtttt aacatcatct 120
tatggtttgg agtagccttt ttcttctcgc tactagctat ctgtatctcg atctccacaa 180
tggaaccccg aagggaactcc attatttaca gaatgacatc cacacgtatc aagaaggaga 240
attaagtttg tgaaggagtg tttttaattg taaatagatt gtttagtatt attacaatgc 300
aacgtgatca atattattta aaaatacaat atctttgttg ttacatattt gtttaacatt 360
cctcatatta ccgaattgt 379

<210> 964
<211> 462

<212> DNA
<213> Ctenocephalides felis

<400> 964
atgggtgcatg gatgcatttc gctgatcggt aaaatacgcg atacaaaaaa ttaacaacgt 60
tgcgcgctctc ggcgataatt acngttcnan aattctcaaa nctttantct tctcntanta 120
naattatgtg tatttagtcn cgcgacnata nttatacggt tcgogctata tatanaataa 180
taaagattca ttacatactc aaattactat tacnatatac attttgcant gacaaccata 240
tcnttggnca tgnaattata ttgtnactgt anattcaata catttctctt tatttaantt 300
tgnaactann ancnaactaa ctattantac tcgcattana tccannntta tanctatncc 360
tatnntcgng ttttttactt ttgtcataca ctttctttt nttttacttg antannatcn 420
cttaaaaacgn tnanaatnan nccnacatct atnttagnaa nc 462

<210> 965
<211> 258
<212> DNA
<213> Ctenocephalides felis

<400> 965
gtatatacaa taatcaattg ctaagatata tcaagcatat gtcatacata ctgtccccaa 60
ttttggaggt tttctaaaac aattatgaat ataatgtatt tgttaccaa taatttgcac 120
atggcaacca tatatgaaga tctgtatatt gttcatgggt tcattccaat tctgcacgac 180
tcatattcag acaatcatcc tcgagctaata cctctccacc gactaattta agagatttaa 240
gaagtgaagt tatgtcgt 258

<210> 966
<211> 134
<212> DNA
<213> Ctenocephalides felis

<400> 966
aanaccanga acaanactta ggaacacaag gttttattac ccaccacaat tttgctggac 60
aaaaccctag ccaaagtgggt ttcaactatc acaccagcaa tttccangca agggctaata 120
nacactgnna atgt 134

<210> 967
<211> 462
<212> DNA
<213> Ctenocephalides felis

<400> 967
aaatatgaaa tgtttccgac antcattaaa atttctttta ttcaaataca aaatgtagca 60
nttaanaaaa taatacaaca attaactgtc agccatttta tcttctgagc aaaataacct 120
ttttaccatg tttatcnaaa tttataaaaat tgacctttta acctttcccg atttattaaa 180
aatggatttg tatataaaaat taaatgcgca agcaggaggc agggataaaa taattagtat 240

cacgcgtcca attttcggcg tgttttgtcc aaatcttggt

340

<210> 971

<211> 135

<212> DNA

<213> Ctenocephalides felis

<400> 971

tttttttttt tttttttttt ttgtgccttc agattttatt taaatatata acataagana 60
ataaaaacat tgatggctta tanaattcca atottattan caatgtccaa tgcacgtaa 120
tccctggcta aacgt 135

<210> 972

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 972

tttagctgca tontccccaa cgntccaaaa tactccccc antantaatc caacaagaat 60
gtgacanagt acacgcaatt gtgcaaagtn aaagtctcgt gacgtgcaca atagcgatcg 120
ttttgacaat actgcnaatt gtttganaaa tgatgtcggg tacaaagatt ccgatcttgc 180
tttcataact ttctttaagc tgcaagagag aggctccgtt tcgccaaatt ctattcgnat 240
tgcancantc aagagcngga tttttgccac gagcgattga tctgtatgtn tgttattatc 300
acatttcana ctgttgatc ctacttcggc gtgatttcta ctccatttan tttctgtnan 360
ctctaccaga ngatcgaggn tttcgcccggt tncaaacttg cnangntcta angcacaatc 420
ggctctatta caaaantgtg gnattganng gccgaatcnt ctatngttna aatcangtca 480
caagtnggcc tangtata 498

<210> 973

<211> 305

<212> DNA

<213> Ctenocephalides felis

<400> 973

tgtctgcttc tatatatattc tccacaatta ggacaatcaa taacagatcc agaccaagca 60
tatgacatta aaccagcaac ccacgaccct gcagcaagtg gccattatt ctgactagta 120
tcagctgact gataatgcgg tgttacaata acttccattc cagacatatg gcaggccttg 180
caaacataaa ctttattgcc aaattgatgc tgaaatctgc attttttact gttataatgc 240
gattctcctt gctgttcatg gcccatgctc tgtgcacatc tttcgccaca agncaagcaa 300
atggt 305

<210> 974

<211> 171

<212> DNA

<213> Ctenocephalides felis

<400> 974

agaaaaaatg agccctgacc ataagcaaag accgaatcac ttgagtttta cctctgaacc 60
tgtaaagtgc cataacaata gtctactca tagcccaaaa tcagcaactt tatcgaattt 120
accgagacga cgcagtag atgtggaatt tatagatatt tcatattcag t 171

<210> 975

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 975

tgaggtagaa gaaatataat aaatccaata caggagatac gaatcttgct atttgccaat 60
cgatgaagca aatttcaacg gggtttaccat cctgatattt aaacatcata ttattattcc 120
aacaatctcc atgtgaaaga actctataat tttcagaacc cgttgcatg aaacaacttt 180
ccatatattc ttcacaatta tctttgattt tcttcacatt ttcattgaaat tctgtgatac 240
ctccgtcatc tattgcttcc aaggcttggt tcagtcocaaa atcgcataaa tcgtaaaagg 300
cttctctacc ggtcatatca tacatggctg agtcgatttg agtaatttta tgggaattttt 360
caggctgttg atctctcatg acaaaactta atgcgtgata tttagctaata ccttttgcaa 420
ctaacgttat gtgagaaaaa tccatttttt ttcttttgtc aaacattaca aaatttctgg 480
cgtgcaaatac ttccaaaa 498

<210> 976

<211> 255

<212> DNA

<213> Ctenocephalides felis

<400> 976

tgaagaagct aatcagcaag caaagcaaaa tgatatacaa aagaatcata ataaaaatat 60
ctataaagga ggacattata aaaattatca aagaggtggc tatagaggac gtggaggaca 120
tcattccagg cgaatgcaga atcgaacaaa tagtgatact actaacgggg atagatgaag 180
atggcttact cttttagtaa agtatatgta tcaatgtgaa gcgataaaga aatatatcaa 240
gtcattataa taagt 255

<210> 977

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 977

aagttttcgc agtttacaaa tccagaagag ataccagagc aacttcaaca tcagatcaat 60
gagtgcagtt cacaattaag aatgtctagt tcagagctaa caaagctgct atcgtcatta 120
tcaagcgtat tgagcgatca atcatatata caacagcttc tcgatatcaa cgataccatc 180
actgagatgt cagaagttga aaattgaaag tcatcaacaa atgcatgtc atcaaagaat 240

ggcacgtcat aaataatfff attaaattct ttttaaaatt tatgtattat taaattgtaa 300
 tgtctaattgc ttcatattag tattaagttt tcaaattttt atgttttttt tttgtattgt 360
 attaatagtt tacttatttt tcttattttg atatacctgg taatttgtaa cttataaaga 420
 agcttaagct cgtataaaac tatctttata tttatcaatg cttatgtatt ttaaaacana 480
 aataaaatgc ttganagg 498

<210> 978

<211> 288

<212> DNA

<213> Ctenocephalides felis

<400> 978

agaaacacac acacacacac atgctatata tattacaatt ataatagatg ccccaaacc 60
 acatgcaatt gactgttatt tactaataga ttttcatact tatttattta acaaaacgct 120
 cttttccaat tctctctcat gggttaatgta tcagcatgac attaaacatc aatggatttt 180
 gaaatagtaa ataattaata tttcagtcac ttcataaata atcaacaggc aaactataaa 240
 tcacacaaaag gggttgcgata atttaatagt tttgcttgaa tataatgt 288

<210> 979

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 979

atttattttt gcttaacaag aaactcatgg acaataaaaa ttataggtaa catccggacg 60
 atataaaaaat aatttaaaaa atgtcacttt ctaacaatgt tctagattta ctaaaatatt 120
 agttatgctt tttatgtgct ggattggcat gcaaaactct accaaataaa aataagaaat 180
 ttgaaaagaa acaattatttt aaatttaata tatttaatta aattaaatta cagggcagta 240
 aatatctttc agcttatggt cttaattcaa aaactttatt ttcttttaat tcaagatgta 300
 taatttgatg ttgcctctta caattctagt attctactaa tatttttgga ttttgagttc 360
 tctacatggt gcactactgg taacaacctg gtgatacttt aatggcaagt attaccttga 420
 taggatttcc attaaaacat tgtggcataa gagtattggt tcactcatcc tcagttgaat 480
 tttcgacaaa taaagttt 498

<210> 980

<211> 251

<212> DNA

<213> Ctenocephalides felis

<400> 980

tttccgtaat gatgatggtg ggccgcgactt ccggaatggt cttgccggaa actttacacc 60
 aaaagttacc ggaaacgcta actgaagctc acgtattcgg cagggatcag gtgttctgga 120
 gcttaccgaa aaaaggtgta tcaaagtcta cagatacggc cgtcaagaaa ttatcacaag 180
 aagactgtta aatagttata atttgtattg ttatacatat gtttcttata taataaaatt 240
 atatttattg t 251

<210> 981
 <211> 351
 <212> DNA
 <213> Ctenocephalides felis

<400> 981
 tttttttttt tttttttttt tttgttgata aaacacaaat ttatttttaca tgttaaaaat 60
 tcttataaag taaatacatc atccagttac acacgtatatt atatattccat ataactcgac 120
 aaagtagctt tacacaattt ggaaattgca atgtgttaaa actaattggt ttttagaact 180
 atattatatt atattttggg gaatatttaa gttacggacc tacaaaatta agactatgta 240
 atgtattctt ctttagccac tgacaaattt aaataataaa tcttgcttgc ataagtaatt 300
 tgaactaata tcgatgactt cctttcgttt ttgaaaacta aaaactcttg t 351

<210> 982
 <211> 224
 <212> DNA
 <213> Ctenocephalides felis

<400> 982
 aatgattttg tttgacaaat gggtttttaa taaacaggta ttcgaaattg atacgattga 60
 tgatgaagta gaaaaattct ggaacagcca tataataata gtccaaaatg tatttcatag 120
 taaattacaa aaataattga ttaaaattat aaatctatga ctgttcttga tatgaacctc 180
 tttcataaaa catattaaga tttgattcaa aattgagggt taag 224

<210> 983
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 983
 tacgagtgc cattaaacgc tcgagggtgta ttcgacgtgg cccgatatgc ttgtgcagct 60
 gagttatatt tcaacagcgt tctgcagcag tgcgtacctg cataccagtc agactgttta 120
 ggtgcaagtg tcaattcttc cccatccata ccattccttac catccttacc atctttccca 180
 accttgccaa catcttcccc aacagcagga tttccttttg gccgaaaatc tcttgatatg 240
 caaacaaaaa ctggaactaa atgtacaaaa ggagaagttt ctaaagacga tttaaattct 300
 acatgtacct agtgagtgtg ttatatgaaa ttgctattgc atattacata caagcttaat 360
 aaagggttatg gtgatttatt tcattttaaag gcaatgtatc gggtttaatg ttttaaattt 420
 atttttatatt aatattaaat agattaatta aaaatctata aagtgataag aggctgatat 480
 ccataatatt attgaata 498

<210> 984
 <211> 102
 <212> DNA

<213> Ctenocephalides felis

<400> 984

agaccaagta aaaatctcac tcacagcttt taccttatta ggatcattta aaaatctatc 60
tagaatgccca ggttttgccca gagattgctg cactttctta gt 102

<210> 985

<211> 204

<212> DNA

<213> Ctenocephalides felis

<400> 985

ggacggccga ctcgctccgaa ttatgctcgg cacgtgttcg attcaaatga tcccgtacg 60
ttcgacatcc aaatgataaa cactatctaa tcaagtgatg ttgtttaatt aagcaagtgt 120
tagttogaat tcatttttgt gttttgtgta tattataata aatggacccc gaaattcctc 180
tgaaaggtgt gactccgggt ttgt 204

<210> 986

<211> 324

<212> DNA

<213> Ctenocephalides felis

<400> 986

gcgccggacg cgtcaaataa actaaattan atttaattta ctaacaaaca tttggtcatt 60
agtttaatgt caataatgtg cattttacat ctaataattt gaaatcatta atggtcataa 120
atcttcgaaa agttgatggc acttcatgct tcaaactgcc aacgacatan caagctcaag 180
atgcaatatt aaactatggt gtaaacatan natatattat tgaaatttta taaagaggac 240
ttttataatc gtcxaaagtt tgaacttaata caanataaat tatttctcnt tantatattt 300
ttatatttta aagaaaatgt ntgt 324

<210> 987

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 987

gtgagttagc acacaaatta gtctcagatt cgatcccaac ctctgtcgat cctatatcag 60
acagcacgag aaaattttca caaattttat agatctcaat ttaattttcaa gtgaaaatcg 120
ccttgatgcc gataacaagc tgcatataaa aatattaagt taaaacatat tattagatat 180
aatcataata tgtcgcaact agtatagagc aactactgaa taacattcca gaaatccaga 240
aacaagccat gcaataaaat ttcaatacaa ttactgaatg tcctcataat atgaaaaaaa 300
aatanannan atantataat atataatcga agtaaattt caattaacga aataaaatcg 360
taacanagaa tttgagagaa taatttgcac tatttatatg gcgatatggc gttgtcanta 420
gtattcnctg tatagaatga tcaatctgat aagaatgtca catattaaat tatttanttg 480
aaaatttata tgaatccc 498

<210> 988
 <211> 420
 <212> DNA
 <213> Ctenocephalides felis

<400> 988
 aatctgaatt tcatgaattt tggaaaaatt agtcatcata atttcaaaat ttgtctttga 60
 caacttttaa ggtagctaatt tctcacttcc tattaacttg ttttaggaca aaactccact 120
 tacacctagt ttgaactaca aagactacta tatatacaaa ttgaatttta tgatttttgt 180
 ataattttata aattcaaaat tcaaaatttt actctgccaa cttcaaaagt agctgaatct 240
 cacttcctat taacatgtct taggaagaca aaatttcact tacacctagt ttgatcttac 300
 aactactata cataaaggct aaatttcactg aattttggaa aaaatgactc tcatcattat 360
 ttcaaaattt tacttcgaca actttagaag caattccact tactggtttg acctacaagt 420

<210> 989
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 989
 tttttttttt tttttttttt ttttctggnc catacaactc taagctttcc aacatttgta 60
 ttttattcaa ataatataa ataaaaatca taattcgaca attttacttg tatttatctt 120
 aaacatattt acagtatttc ctcaaaaact gttaaataca ataagttaac ttaaatacat 180
 ggatgttctg agaatgtgga tgagctcaag attgtagaac tgagtttgat ctacacaatt 240
 tttgcctaaa aggttcgact actcagaaag cagccaccgc tgattccata ccgcctcaca 300
 tttgacaata aaatatatgt ataagttaa ataggatttt aatggaaaaa agccaattta 360
 atactttagc attatgaata tgtattttcca aattagtcta taaccgaatt taacctaaaa 420
 tacaggaaat acatattcat anatatacat atatttttaac acaaaaagggt aacttgtgca 480
 aaaatgaaat tcaaatacac 500

<210> 990
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 990
 tctttttcga tcattacgcc agtagtatct tgcataatta tgttaacaat attgttacat 60
 tttataaaat aatcttacta ttatctatag aacaatttat aattttatat atatcaacat 120
 tattgtttat tgctagatat tagaatttgt gtatttgata aatgaatggt ggtttgtgta 180
 aatgatatat aattgcacga ttttagctca caaaagtgtg cttagatatt tgaactaaat 240
 tatggacaga tcgataccta gatccataac aaaaatttat ttaaatttca aatataattt 300
 ttttttgctg catgctgaat aacatctcgc attatctttt gaaatcggtt ctttgttgc 360
 aaatctttta attctaaaca cttttgtaaa gatccatttc catcgaatgc attagtcatg 420
 tcttgaaaat ctggagctgt ttcagtattc gcggaaatga aatttagagc aaaactacat 480

aaaactactc caaagtgt

498

<210> 991

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 991

tttgctcttc atagttcagg tctttataag accagtatgc aaaatcagct tgtgcaactg 60
caaaatcaac atcctgtgaa aatactgcca gagcggttatt ttcttttgca tatgttatga 120
tttctgagtc acattcttca aatgtggatc taataacatt acatttattt tggaagctac 180
acattatgac ctcaccgatg ttacaagctg gctttatatt atattcatta acatattcca 240
aaccattatc atctaaagta tcgaagattt cataaatagc catgatatca gacctttttc 300
gagctaccca tctatcctgc atatcatcta tgttgcaccc atcaaaaaat gcaactaatt 360
ccacatcaaa cctttgcaaa aattctatga attcaccagc tttttgctta tacaatttgt 420
attgacctcc tgtcaaaaat tttttttggt cagtctctct aaatatttgt ctagagcaac 480
ttccatcgat cactatga 498

<210> 992

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 992

acactgtcag taatattgat aaaagtgggt agcaagacgg aaataatgtg cagcctactg 60
acattgcaga tgacttaaac tgtgttgatg tggatagtgt tgacactgaa acttactcga 120
aatgcgacaa aaacattaaa cttattgata aaccactcaa gaagcaaatt gtagttttat 180
cagaaaatga ttttgatgac ggctgtccaa aatcgaaatc taataataat aacgacccca 240
aagaaatttc ttctcatatt tgctaccttc aagatagcga ttttaatacc agatcagatt 300
taagtcggat catgactccg aaacatattt caacaccaga aataccaaag tctaacgcaa 360
ataattatgc gacttttagat cagagtttcc atttaggtca aaacgttcaa aatgcgcaaa 420
ttaacaaaaa taaatacatt tatatcgatc ctaataaaat tgaacaagat tttaacagca 480
atttaaataa tttaaaca 498

<210> 993

<211> 235

<212> DNA

<213> Ctenocephalides felis

<400> 993

aattgatcca taaattatga ttaaaagatt aagttactta agggataaca gcgtaattat 60
ttttaagaga acatatcgac aaaatagatt gcgacctcga tgttggatta agataatttt 120
aaaatgcaga agtttttaaaa tttggctctgt tcgaccatta attcttacat gatctgagtt 180
caaaccgggt taagccaggt tggtttctat ccttaatttt ttaaaattaa ttagt 235

<210> 994
 <211> 72
 <212> DNA
 <213> Ctenocephalides felis

<400> 994
 atcgatcttt ggccggctaaa catatcttgc tgagcgaagc cggccgtata gaaatatgtg 60
 gctttaagga aa 72

<210> 995
 <211> 206
 <212> DNA
 <213> Ctenocephalides felis

<400> 995
 aacagacatt agtcaccacg cgctcgacga actttgattt tttttccgaa cgacaatcaa 60
 gtaaaactgca cataaaagag gagatgagat ttaatttttg cgtttaatgt atgtaaatac 120
 ttttaatctt aattaatttt tgtcattcgg aattaaagca gtcacttgat ggtctattgc 180
 acggaccgta gtaaaactgcg ccgcgt 206

<210> 996
 <211> 260
 <212> DNA
 <213> Ctenocephalides felis

<400> 996
 aatggtgtaa aaactgtaaa tatcccattht gttgtcacca gccattattg atgatttaat 60
 tacagttatg aaactgctga tgctatgaga attaaaattg accaaattat tgttttattt 120
 tatttaaaaga taaatacata tatttaaatg gaaattcgtg gctctatgtc cctaattggga 180
 cttctattat ccataggaac tgctacagga gtgatattca cgttagaacc agaggatagg 240
 atttcattaa aaatgggcgt 260

<210> 997
 <211> 310
 <212> DNA
 <213> Ctenocephalides felis

<400> 997
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 aacgacgacc ttttaacgaac tgctgtccaa gcgcattcacg ctgaaactat gactgtcgtg 120
 gggtgatggc gaactcattg ttgaacctta caaaaactct taacttaaca ataaataactg 180
 ttcatataaaa tcaataaatt atattaaaac taaaagcgat cgaaaaaact attttttttt 240
 aatttggttaa aacaatctta aaagattggt tagaccccgga aagaaacagt gggttggttac 300
 tggtgtcaca 310

atgtatatat gtatatatat atatatatat attgaatggg agagtcttgg atttgtgtat 180
 attttgtaga gtttcgaaca agaatccaaa aataatacaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaa 247

<210> 1002

<211> 297

<212> DNA

<213> Ctenocephalides felis

<400> 1002

cacctatgta taattttata tatatatata taaagaaaat taaatctcac tcgattttta 60
 agataataaa ataaaaataaa gttacattta taataatgta agattaaatt gtaaatctta 120
 atttaattat atttcaaatt aaatatgta atgtcgaact ttaaatgcaa tttcatttat 180
 attgcacgat ttattttgta ggtcttgagt aaggggagct acgataacgc gtatcgcggg 240
 tgctcacgtg acggctagtt agagacgggt cctcaacacg gcccttagag gagctgt 297

<210> 1003

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1003

acgcgttgat taattttgcg aggcagcagc ccaagccatt tctttttaat tagtagctaa 60
 ttagacaaaa ggttttgtca aaaatcctga gccgatttcg aaaattttca actttttcaa 120
 aaatatctgt ttggtattgc ttccccgtag ttacttgta aaataaatta aaatagtttg 180
 acaattttgt agaaaaata tttcagattt gtaaaaaata ttttaataaa gtattgaatg 240
 gtcggtggacg atgacaaatt ttcaaacttt tatgttcaca attttaaaat ttgctgcac 300
 tcaattcttg tagattaaat acacatatct gaaagttttt gcaacttgtc ttaagccact 360
 aaaatgccac ttacacctag ttaatataag ccaaacccaa tttgtaaata agtatacaga 420
 aaaacattcc aaattttata gataatacat aatctcagat tatttaagtg gtttagaatg 480
 gttgccaggn agaactaa 498

<210> 1004

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1004

tcgttgattt agagttattg tattacatta caataaattt taatttttag ataaattgac 60
 gtctttttac atatgttttg aaaatatctg tattagaatt ttaattacat actatcacia 120
 attaataagg tgtatataaa tatacagaga aactataatt tgttttaaatt ttatttcgtg 180
 tcgcttcgtt tcaacaaaca agcaaatttc catgaacaat ttattggcaa catttataca 240
 aatagctaaa atttattcta tttttgaata tcatgaatat ttaaaactta aattatttta 300
 ttataacgat atacaattat taactttttt tatatacctt tacgtttcaa atgtttttga 360
 atattttggc ataccttaaa aaaattgatg tatgtgtgtg agtggatgcg gatacaaatt 420

ttcgggaaca ccgatcaacc gatttaaata aatcaaaata cattcgaata gtattaggca 480
 ggtctagtcg ttccaaaa 498

<210> 1005

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1005

aaatctcgat agttacgcga ctcataaata attattttaa caatgaatgt taaaaaaaaat 60
 taaagtttgt aaatataata tatgtattgg attaacttag ttaattctcc ctcgcaattt 120
 tatactatag taaccagaaa caaaaatcag agtgtgtaaa atgtaaattc atatattttt 180
 ggtaaaaaata caatcaagat ataacagtgc cacaatatta ttaaaatacg tatttgtgac 240
 gaaacctaaa gtgtagtcag aatataaaaa acaataatat ttataccttc aaatgtatgc 300
 tttgaaaaaa agcattcgaa gattttgttt aaatatattt ttaagtccac atttatgttt 360
 gttcgttcaa ttaaattatg tttcttttgc aagtaagatt atggtgtaga tattgtcaca 420
 aaattagtat attttatgta attttaagca tattgntatt ttttgaaaaa tcggactatt 480
 gtcacaaaaa ttaaataa 498

<210> 1006

<211> 67

<212> DNA

<213> Ctenocephalides felis

<400> 1006

tattcgtagt atcaatgaag tcgtccgcc taagcattga tgaattttgg acaacgtagc 60
 atattgt 67

<210> 1007

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1007

catttgatgt gatttatattc ttgagtttat ttacttcato ataacagcaa cataaaggat 60
 attccaaaaa atatgtgcga atgaatttga tagttttcat cacctgtgga tgtccaatat 120
 cgttttttaa atttttctca catagtgtag taagtccttt aagaaagtca ttcgacaacg 180
 ttttggaatt taattccaat aacagataat tctctggata gttactcgga aattgtatgc 240
 acaaaataat tgtattaaat gatgtcgtgc taatttctac acgaaccatt tctccgacac 300
 aagtaataag ctttgtatta tocaaagttt tctcacatag ttgtcgaaact gttttaagtt 360
 catcgtctaa tgcagccata cttcgttttc tctgtataat gtgttatata attatacagc 420
 aacaaatgca gctgtttaga aatttttagt gaatatgagt atgatataatt ctttagaaca 480
 tgtaagctaa ttagatta 498

<210> 1008
 <211> 95
 <212> DNA
 <213> Ctenocephalides felis

<400> 1008
 tacgagtga cattaacgc tcaaggtgta ttcgacgtgg cccgatatgc ttgtgcagct 60
 gagttatatt tcaacagcgt tctgcagcag tgcgt 95

<210> 1009
 <211> 406
 <212> DNA
 <213> Ctenocephalides felis

<400> 1009
 gtttgcata ttagttcggc ggtaagaaat atttttttaa tagcttgatg aaaacaagaa 60
 aatatttaat cgagtgaatt taaatataaa aatatatata tagaattata tgacaacaaa 120
 aaatgagtaa tgtagacgtc gtcgtgtttt cgtttcttgt cattttattt aacatttctt 180
 acgcttatta catattgttg tatatacata catatatata aattaataga agttttatcg 240
 aaacgatatt gatgaaatgt gtcttgtaag gtttttttta attacgaaaa aaacaaaaaa 300
 tgtgtgaaac tgtgattcct gcctttctcg tgtaaaacgg cgatgctaga aaatagaaac 360
 attaagcgtt ctttccattt aattaaaaat aattactaaa aagctg 406

<210> 1010
 <211> 84
 <212> DNA
 <213> Ctenocephalides felis

<400> 1010
 taattaattt taaaaaatta aggatagaaa ccaacctggc ttaaaccggt ttgaactcag 60
 atcatgtaag aattaatggg cgaa 84

<210> 1011
 <211> 228
 <212> DNA
 <213> Ctenocephalides felis

<400> 1011
 ctcgtaaadc acttggtcac cagtttgatt tgtggtagtc tcattttcta taggnataaa 60
 catcagntgg ttcattgaaa gggttgtttg ggtgcttgtc ggcttcgtcg aagggattgg 120
 tgcttgtttc gggttctggg tcgtcgaaag gatttgctgg aacgtcttgc ttggcgtaac 180
 tgggtgtccc gtagacttgt ttogaagatt caccaattgt tttgacgt 228

<210> 1012

<400> 1015

atcctttttt tctatgaacg gtttttaggta acggagaata atgtaaggca tctactaaagt 60
cgttttttatt tgtgatttca tgattaggct cgggtcttct gacccgcata aattgacccc 120
gcaattttgc ttcctttgcc tcgtttgatg atacagcccg ccaatccaaa aataataatt 180
ttggtaaagt atgt 194

<210> 1016

<211> 401

<212> DNA

<213> Ctenocephalides felis

<400> 1016

tatcatcaac agcaacactg tgaacctttt ttcttctcac gacaccgttt atcgcgccat 60
cattgggtcat atccctatca atagatgtcg aatctaattg caggtgagta ggtctgggag 120
gagcagacat agacctttcc aaaagttctt ctgtcggttc aacgttcatt ttcattaaat 180
coctcatccg tggagggttt actggaggcg tgctattacc ttctgaagggt attgtctcat 240
aaatggcttc cgatgatgca cttgatgcc aatgttttga caataattca ttgtcattaa 300
tgactgcagg ttccttttgg gcagctatat atgactcagg gcgtattoga tgtgatcgcc 360
tcgattctgt cgtcgtctga gattcagctg aatgggaacg t 401

<210> 1017

<211> 422

<212> DNA

<213> Ctenocephalides felis

<400> 1017

tactgatttc aaaaacaaaa tcnaanagaa atatactatg aagttcaact gtaatgggac 60
ttagngcaaa taaatgcgag ggagtgagag aaagagaaag agaaagagag agtttgaata 120
aattatatta actattgcna gaaaaaaaga ntttaaaaca attatgttaa ctaatgacaa 180
tatatgntcc attcatcana tccgaaagac tgcacaanat acttattctg naaagatggg 240
aaaggtnagg ttttcgaatg cccacctaac tatgtatatg atcattctaa aaatatgtgt 300
aaaaagaaat cagtcagaag ntgattgcac cgtnatgaaa tgcacaaatc ccaattcttt 360
ataacctatg caccggancc atcaatntat gctttgggca atgacaaatt gcaaccgatc 420
gt 422

<210> 1018

<211> 233

<212> DNA

<213> Ctenocephalides felis

<400> 1018

taattaattt taaaaaatta aggatagaaa ccaacctggc ttaaaccggg ttgaactcag 60
atcatgtaag aattaatggg cgaacagacc aaattttaaa acttctgcat tttaaaatta 120
tcttaatcca acatogaggg cgcaatctat tttgtcgata tgttctctta aaaataatta 180
cgctgttatc ccttaagtaa cttaatcttt taatcataat ttatggatca att 233

<210> 1019

<211> 459

<212> DNA

<213> Ctenocephalides felis

<400> 1019

cctaaaaagc ggatttggat aaaatttgct ggttgtatgg gagctgccta ttcatoctcg 60
 aggaaaaata gaattagctt ggatttctcac acgtgagcaa aacccatcgt cggaattaat 120
 gaaagaaatt tggacatatg tgaaaaataa tacaccata gatgttgaca aactaaaaca 180
 caccgagcaa aattgtggaa aggatttctg aagataatta ctggatataa agncctttta 240
 agatcagctt tatcaaaaca actgatgttt aagaataact aaatatatta tacttaatac 300
 ttagcttttc ctggcaatac tatattaaaa tattgacata agtgcattaa tttttttgca 360
 atagatttgc tttttatatt caatatataa tatgnattaa taataaaaatc ttctaacatc 420
 aagtgtataa atgcattaat tttctcaaaa aggcttatg 459

<210> 1020

<211> 477

<212> DNA

<213> Ctenocephalides felis

<400> 1020

cttgaatttg ataagtgaag caattagaat aaagtccgaa cttttgctta gatttagaga 60
 tgcattgatg agaccagcct tgtctaaagc aaagctttcc ttggaacgac ttgaaaaggc 120
 tgtttcaatg gctattgatg atgctagact taaatttgaa aatgccatcc aagaaatgaa 180
 tgacgacgca gtaggcattc ttaattccat cactgaaaaa atccaagagg aaaccgagga 240
 gatcaaaaca aatattggag gattactatt acaacaaatg ttcgatgatt ctgcccgtca 300
 atgcttgagg gatcaattgg ctgcagttaa agttttggcc aattcaacaa tcaacgatgc 360
 aaattcatgt attcgtcgtc aattatttgg agctaattgat ttaagtata atcttggtgc 420
 aatatttgat gaagctttcg aaggtgttca agaattagtt gatgagctaa atgattg 477

<210> 1021

<211> 433

<212> DNA

<213> Ctenocephalides felis

<400> 1021

ccatgttggg aagattttatt attttatatc ccttncaaaa atctgcacgt tgttcacaaa 60
 aaaaaatcat aaaatcttaa atttatttgc aaaaaaaaaa atagtgcggg aggagtgaat 120
 cttcgtaaata aaactgcaa aagttacatt gataatttac aataaattca gacagtttgc 180
 aacgtttcta gaaaagtcca gaagttttga aacaaatttc atcatattca accaaatgct 240
 ttctttttcta tttacottta aagnttcaact tcaatatctc cctataatat tttgntacaa 300
 gagtgttgnt ttaagattta tagcatatta caaactgnta gttatattat tttctactta 360
 tcggtaatgn ttcctttttt tggtaatcag tttacaaaac tttctgcaaa aagttgtgcc 420
 atcaacaatt tgn 433

<210> 1022
 <211> 319
 <212> DNA
 <213> Ctenocephalides felis

<400> 1022
 atttatttgt tgaatatttt atatcaattt atttttgata attattttga taagctcaat 60
 ttgttctttg tgacaataat ttaggcataat aaaagaaaac cagtaaaaca atacaataaa 120
 atcaccaaca attagtttgt ttttcttctg tgttattaat catcagaaca taaataaatt 180
 ctataagtta ttttgatata cattattgac tattagatac aattttattga atcaagttaa 240
 ttggtcgtaa ttttttacta tttttatatt tgtaaataat aaattaagat cttgctttta 300
 gaagtcttca atgtatagt 319

<210> 1023
 <211> 518
 <212> DNA
 <213> Ctenocephalides felis

<400> 1023
 aatttttgga atactttgaa atatattctt aaatttaaatt cttaaacata tacataccac 60
 tttattaatg gagttttatt tggcatgcta attcttccat taccttggtg attcattatg 120
 tgtagattg gcgcctgtat ttattaggac gaagaaaatt gaacatgcca ttccttctat 180
 tattttttat ggcatttggt gtggtattgt cactaccatt tgggtgtatct gaagtttctc 240
 ttgtgtcaga caaatgcaac aaagtgcac gacctccatc taaacgacta ggccccaac 300
 ctgaagtga tgcataattca ccagtatgcc ttgcagact gtcattagca tgtgatccat 360
 ttgctgaaag gctgtttggt tgagacctat gccctgcac catttcatca tgagaaattg 420
 tattccgatg ataatcaggg tttgttgatg ttctaattgg cacaggtgga ggcggtggc 480
 taacgctgac agtgacagta tttgaatact ggggtggt 518

<210> 1024
 <211> 112
 <212> DNA
 <213> Ctenocephalides felis

<400> 1024
 ctggtttgca agtcattcca ctggacatg tttccaatgt tgtttctaag aaatcagngc 60
 caatcgcaat gcaaagggtt gctgtctcac aatcctggca ctttatttct cc 112

<210> 1025
 <211> 304
 <212> DNA
 <213> Ctenocephalides felis

[illegible]

gactctc

127

<210> 1029

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1029

aaaattccaa atttttagttt ataaatcatc ttatatggaa actgtctgca acaaaccaga 60
ttttaaaata gaatccaata aatacggata taaaatttta ttaaaatata caaacataac 120
aaatgtcggt aattactaat tcaaagtttc atacgatatg tcatatgcta atttttagatt 180
tattatcata aataaattta ttatttaa atatttagag gaaaaaaaaa tattttctca 240
attctctcct tcaaaacttc ttgcacttc tccggctcca tacagtttta ataccacttt 300
tttcacaaaa ttcaacattt ttgtaaaatc cattgtgaaa attcatttgg ctgtttatta 360
aaagacatca tcccttcgga atctgttata taccocaaac cagcactctt caaatacaca 420
aaatcctttt tcaagttaac ctggaacgtt acccatattt ggaagttcct tttggattca 480
acattgaatt tgttttcg 498

<210> 1030

<211> 454

<212> DNA

<213> Ctenocephalides felis

<400> 1030

acaagtanta attgtttata caatatgata catagttgaa aatagcatga aatatcatta 60
taattttgaa aggataaatt ctgttgacat ttttcttttt tttaaatatt tttcatatat 120
atttgatttt tgctgaacat tataaaattc atgaattata gggaaataga atttgtaaat 180
ttaaccaa ac ttaccaataa gtcaacatta tatgataagg aaatagtaaa tatgacttct 240
taaaatatca gttattaaaa tttggagcaa tatgcattat caataaattt actggaattt 300
ttatgcctga aatcaaaatg ccagaatagg ctgtgaatgn tttaaaact ttttgatagt 360
tgatgatgga atagctgatt tgtgaatgat tctactgatg natatttact aatactaata 420
taaacacga ananannngn anaaaaaaag cttg 454

<210> 1031

<211> 154

<212> DNA

<213> Ctenocephalides felis

<400> 1031

tgatagatgt attgcaataa gttatttttt tatgaaagat aatgttcaac actaattgaa 60
atagattata agattttcac tacattttca tcccattttt tctacatcat gaaattctgt 120
attgtatgta attcattatt tttaagttaa atgt 154

<210> 1032

<211> 285
 <212> DNA
 <213> Ctenocephalides felis

<400> 1032
 atattttatat tattatgata tatattgtta aattataaca atatgattat ttacatacat 60
 attttatttat ttatcttcta ggaactcttt atccatatta ttgaattttt ctactaaatc 120
 tgaaggtatt tctagagatt ttaggtcatc tgtcccaatt tcttcctcag ttcttattag 180
 aatgtcgaca acattctcac aagcaagcaa actggccttg tcaccaagtt ttaatgaaac 240
 ttgttttgtt tcccatttgt ggtattctct taatatttca taagt 285

<210> 1033
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1033
 atcgaaaaca aattcaatgt tgaatccaaa aggaacttcc aaatatgggt aacgttcgag 60
 gttaacttga aaaaggattt tgtgtatttg aagagtgctg gtttggggta tataacagat 120
 tccgaaggga tgatgtcttt taataaacag ccaaataaat tttcacaatg gattttacaa 180
 aaatgttgaa ttttgtgaaa aaagtgggtat taaaactgta tggagccgga gaagtgcaaa 240
 gaagttttga aggagagaat tgagaaaata tttttttttc ctctaataatg atttaaataa 300
 taaatttatt tatgataata aatctaaaat tagcatatga catatcgat gaaactttga 360
 attagtaatt aacgacattt gttatgtttg tgtattttta taaaatttta tatccgtatt 420
 tattggattc tatttttaaaa tctggtttgt tgcagacagt ttccatataa gatgatttat 480
 aaactaaaat ttggaatt 498

<210> 1034
 <211> 88
 <212> DNA
 <213> Ctenocephalides felis

<400> 1034
 acaggataca agtgttctgt ctgccataa taaaaaacga cataaacgta gtaaatacga 60
 taagtaatat gggcatcatn tatcagcg 88

<210> 1035
 <211> 394
 <212> DNA
 <213> Ctenocephalides felis

<400> 1035
 ttagcccaag tttcacagca ggtttggcag tcaactataat agtatgctcc ctttcatttt 60
 cccctgaacc aactttgnat gtgtaagagc cagcatcatc ttgttcagtt ttttcaataa 120
 tgaattgatg ttcttccttt attaatgat aacggtcctt gagatcattg atttcttcta 180

cttttttctc atctttaaac cactgatcaa caggaccatc tttcaatgga caggttagaa 240
ccaatggact gcgaatatca aaaagttttt gcgacgtggc ttcacottct cgggcataaa 300
cactgctttg ggccaataat aataaaaattg cactacacaa aaactgcttc atattttattg 360
aattttcttc cctcgtattg aaaaagttca taag 394

<210> 1036

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1036

taggaaaaat tatacttgat aacacttcaa attcactcaa aaatataaaa gatttttattt 60
aacgatgtta ctctggtgaa cgaggctttt tttgaaataa tatacatata ctaagtatcg 120
agaactgttg cataaaaactc aaaataatta ctgaagcatt aaaaaatttt gtcgccttca 180
aaatagacct tattcgaagt aatgaaaaca tgccaacaat taatccaatc ttcaaagcat 240
cttttaaacg cctttataag gatattcttc agctcctttg gcgttttttt cttacaaaca 300
ttgttagtgg aatctatcga tccaaagagg tatctaaca tagtattact tgnaattcta 360
tacttaagta tccatgacaa taaataattt acagagggat agatctagtg aatacgttgg 420
ttgoccatga tttttcatga gtttatggcc nnaaaagcgt tcacaatata ggcgttgtgt 480
gaagagagtc aacaatga 498

<210> 1037

<211> 415

<212> DNA

<213> Ctenocephalides felis

<400> 1037

ccacatgaaa ttttaaatgg aaagtatgaa atcagtcgca ttcaagtatt taacaacatg 60
ctatgatagn nttattaaaa caaccaaatt taccatgtag caagtcttcg caaatcatca 120
catttttttt caacaatgga ttttcagtga cacttagaac aagtggaaca gaaccaaagt 180
taaaatatta tagtgaaatg tgtgcaaaac cagagatgaa ggatctagtc aactgaagc 240
aaactgttaa agaaatgata gaagctgttt gtcaagaatt tcttcaacct gaggagaata 300
gattaatatc aagagaaaaa tagatcttaa ttaaatagac tttaaataat tagcacaatt 360
tatttttagc tgaagagatt tcagttttca cttagctgaa ataaaacaac tattg 415

<210> 1038

<211> 109

<212> DNA

<213> Ctenocephalides felis

<400> 1038

aagctggctt gccaccgttt ggtcctccac catttgaagc aaatgttgga aatagaacag 60
taacattcgt tgaaatgtgc agcgacctag gatctgccat catagtgtg 109

<210> 1039
 <211> 440
 <212> DNA
 <213> Ctenocephalides felis

<400> 1039
 gggnaagtag cgtgtgttgc ncttctgaaa tnantnggaa accctcggaa cttntngggg 60
 nantngccna ggacatncta tgcaaaataa attagtaaaa caatataatt naantatttg 120
 caatctttgc tgtgtataaa actangggnt tatnggntga aactgattta aattcatttt 180
 tgaactttgt tcttataatgt tgntcgtcat tagctaggaa tgttcctaca tatactttaa 240
 cattcaccta aatatatata tatgtaatct tatatgtata taaagttttt gatctgtgtt 300
 ggcgaggtaa tattggcttg ataaacagtg tttttaacat gatgaatgtt caattgttaa 360
 atcttgtgaa aatgtaaatt tgcaatttca gctgtgaatg ttttctggct gcctagcatg 420
 tgtattgcat catatggngt 440

<210> 1040
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1040
 tttttttttt tttttttttt ttttttttat aaacaatttt tatttgtcaa aaagctacat 60
 aagctagaac cattngacca caaataatat atcactagac attttttagga agtttacagt 120
 ttgttatata attcttaaac taatttagtt atcagtaagt ttttaagcagt cggcacagtc 180
 ttacggact tgtactaagt tgnccctaaa ttctttcaag gctccccttg cgcattttcc 240
 gacttcacgg actaagttgc ccaattggga ccaggtttct ttgagtgcct tggccaagtc 300
 ttttgctcct tcgtgggcag cttgggagac ccctttcaag caaactctgg cttcatcgac 360
 atcggtgcg gcacaacgca ctccctggct tnggctctga gggcttcggc gtctccctgg 420
 cttntnttca gcggccaacc attttggcga acttgggtga attcatcaog tttggcatct 480
 ntgnaacctt gaccttacac 500

<210> 1041
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1041
 attagatatg gtctgaccat gattgatata ttttgataca ttttaggctt ataatatann 60
 aaaatacagt caatttaaca tttgatatta catatattaa atcaacaata tctaaacatt 120
 gaaattagag aaactgaacc tgaagatagt gatttaagta taaattctaa gctagtaaag 180
 aagatccgaa aaaatctgat aatggtaatt ttaccgctcc aactaaatat ccaaaattcc 240
 agcagaattt gtaatgtaa tattgattct gataaactga aatcaccagt aaaaaaatc 300
 caagaagttc taataatggt aattttacca ctaaggaata taaatgctgc tgcaagagaa 360
 gatttgacta atttcaaaca gaatacccca tcgaaataag cgatcagcaa ttgaagaaga 420
 taattgtgct aattggtgat ggtcttaatt ttatgatcgt ttatatatgg taataataag 480
 tcttataagc ttttgatt 498

<210> 1042
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1042
 gattgctttg aaaaaagtgc agaatttcca aaatatgtca aaataaaaaa acattttttt 60
 ttcaaaagng gtattttctt gtcaaaatag tttctcaaaa atgttaatcg tttttttaaa 120
 aaataataat ttttattacg ggaagttcca gcaatttgcc ttaagacacg atgccatgcg 180
 ccactagtt ataaaaattga ttttagataa tgactttcaa tacgtcgcag gaacatttag 240
 atgcggaatg cgttgcagtg gttaaatcat ccatataatt tgtattagct acctaattga 300
 cttatacccc aaatacctcc acattttcag ttatttttaa ctttctgtag ggtaaattat 360
 agtaattgtc caaaaatcga aaataaaaaat ggttgcatat cttcacgctt tggcatacct 420
 tagaagaat ggatttatgt gtgtgtatgt agtatgtatg tatgtataga gacaattttt 480
 ccccgacgtt ttcgggag 498

<210> 1043
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1043
 aacattgttg taaataatat gttctcgatc caatatacaa tactgtagta aataatatgt 60
 gctcgaattt aaagaaatgt cggggtcgt gtaaaactaca tatatgatga ataataaat 120
 catcaaatac tattgggtat aaacaatatg cattgaatgg tccagagtat aaataataac 180
 tactttacgc ccccggttg gctcgaacca ctaacctttc ggtaacagc cgaaagtgtc 240
 agccaattgc gccacggggg ctcttatcgc ttcttgataa tagtaacaca tctcaataaa 300
 cacattttac acatgatttg ccatttttagt aaataatagg cactcgattt tatagaaatg 360
 tcagggtcgc tcccggtgatt tgaaccogaa acctccgcac ccaaagcggg aatcataccc 420
 ctagaccaac gaaacacatg ttctatccag tgcgtgttgg ggtgcatcca atgtcaacat 480
 tgtagtaata atatggcc 498

<210> 1044
 <211> 437
 <212> DNA
 <213> Ctenocephalides felis

<400> 1044
 gattttcaat acaaagtgga agatccgcc attcaacttt catttggtgc caatgaagca 60
 ggagatgcat caggaaaggt gaccggcagc tactacgttt tactccccga tggaagagtg 120
 atgactgtcg actacgttgt agatggcgaa agcggttttc aaccgaaaat ttctttcaac 180
 aaatagatca agctgacaaa ggaatcgaat cacgtaaact tcattaacaa catcatttca 240
 tagctaaaaa tttaaacaaac gaaacatata tactcatgaa ttactgccta tattattgtt 300
 tatactgcct aataaacaat ttgtgattaa tactaattaa ttactactg ctaaacagaa 360

gaaatatatg acgaagctgt gaaacgcaat aaagttttgt aaatatattg cagattcatt 420
 taaactaaca attatgt 437

<210> 1045

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1045

taattaattt taaaaaatta aggatagaaa ccaacctggc ttaaaccggt ttgaactcag 60
 gatcatgtac gcaattaatg gtcgaacaga ccaaanttta aaacttctgc attttaaaat 120
 tatcttaatc caacatngag gtcgcaatct attntgncga tatgttctnt taaaaatant 180
 tacgctgtta tcccttaagn aacttaatct tttaatcata atttatggat caantattca 240
 attatattatg ttttaataaa aaaaangttt tataaattnt cctatcacc caataaaatg 300
 tattaatata aataaantnt aataatattc ttaaaattaa tctatattna tatataaaac 360
 tttataaggg tcttctcgcc ttttaataata tttacgctnt ttaacataaa aattanattc 420
 tataacaatt ntattaagac agttaatatt tcattcaatc attcattcca gctntcantt 480
 aaaaaactat tgatatgc 498

<210> 1046

<211> 582

<212> DNA

<213> Ctenocephalides felis

<400> 1046

cctacacaac tcganatact cataaattat taanttctaa tcgattncct gaaaaagggc 60
 gttgggattg gtgaaagtgc atttattcgt tacatttctg ataacttaaa aactatttgc 120
 ggaaaactaa aaatatgttt ggagaaaata tagaaaattg aatagtctaa aacattttcc 180
 taacatagga agaccctaca gcaactcggc atactcaaaa aagtttggtg aaaagttgat 240
 aaatattcac agcgcttcac tgntttggtc ttgagtttag gaaaagtgca tttatttata 300
 acttttgaac ggggttatttg attggaatga aatattcggc aaatttatag aaaattaaat 360
 aatctacaaa nttttctttt accgcaacag aaaccaacga aatattccct tcggctaata 420
 cggtgtaaca tcacaaaatg natcgaatca atattttttt aaaattgaaa attgcaaatg 480
 ataaatggaa ttggatttat atttttttct aaaaangaat ggggaactat tccaaggaat 540
 gggagaatgn aagaaaaata atattattcg atngngaaaat gg 582

<210> 1047

<211> 472

<212> DNA

<213> Ctenocephalides felis

<400> 1047

cccggnttgg gtgatcaaca ccaaagacac gtcagaatt ggcgttccat taggtaattc 60
 caggttcacg agagtcaaat catcaaagg gtagcgttct ttaaagcgtt tatccaaaga 120
 gtcccaagta ttatccaatt cctcatccac aaccaaaagga tatgtattct tcgaatccaa 180

actaagttta tcagtgcctt ctacaactac agtgactaca gctttaggta attgaaaagg 240
attcaattta ctactccgt cccatcagc agaactctgc tccgatgtca atcctaaggc 300
tacggaatac aattccttta acaaagattg gggtaaagga gtctcgctt ggaattggac 360
tccatttgga gaatttaata cactcagttc gccgttgcaa tatatggatg ccacaagggg 420
cagtaaataa attagaacct ttgtcacatt ttattactta cggataaaac gt 472

<210> 1048

<211> 221

<212> DNA

<213> Ctenocephalides felis

<400> 1048

aagcagaaga tgagattaat ctgctggaggt tgttgacaaa ttaccagaag atctggncgg 60
aaaattgaac atttcagcac ttcttcgac agaggaagca gaaaaactgg ccagagaaaa 120
atgcagaaag gaaagtggaa gcgacgatgc ttacgataaa gcttttgccg ccaaagatga 180
gctgaagact tgtttcacgt ctttgcgtgaa tatggaggaa c 221

<210> 1049

<211> 427

<212> DNA

<213> Ctenocephalides felis

<400> 1049

ccaataatta catttaattg aaagtgtcat taaaatattg accatgcatt atacaaatta 60
tatttataat tatngcgtta acaaaataaa ataattttgt gctaaagcct ctgcaataaa 120
aagaactgac tcatatgtat aaagatttaa ttgtataaat gcaatacaaa ttaattacag 180
ttaaatttta agaacatatt gcatgacagt ttgttataaa gcataaatga ctgcttagtt 240
ttttttttta atgaaagttt aagacatcta ttataggaag atatatggcg gaaacagaat 300
cattacatat acatcaacat caatgtgcat tacttttttt tttaatttct cttcagatag 360
aatacgatga atataaacat aagtatgaat tataaaattg tattgtatac tgtataaaat 420
taaattgt 427

<210> 1050

<211> 570

<212> DNA

<213> Ctenocephalides felis

<400> 1050

aaatacaagg ggttgatga aaccaactga tgactgtgat gatatgaaat gccaggagtg 60
caaaggtaac ctttgtaattg tcgatgtttt cccaagaaat cgcagggttt gcaacgctaa 120
agatgatgcc aagggaagttt gtctcaagcc acaagatact tgtttgagta ttttaaatgc 180
acaagggtgat gccataaaat tagggtgcac cagcaacctg ttcaagaacc agaattctgaa 240
aaaaatgtgc gagaaaaaac cagaacgttg cccaacttgt gacaaaaacg aatgcaatgg 300
tgatgcaaaa aaacacgaat gtgtttcttg tgatgaaaat gatgaaaatt gccttgacga 360
ccctgaaaaa gtcgagacga agaccaaatg catgggcaaa tgctacttag atattgacgg 420

agataaagtg aagagaggct gcaccgacac ctacaaatgc gataaggaaa cttgtctgga 480
atgcgaggaa gagatttgca cgagcgaaat gtgctatgcg taaattgttt aaataatttt 540
tgcaagtttt aaataaaatt tatcaacttn 570

<210> 1051

<211> 386

<212> DNA

<213> Ctenocephalides felis

<400> 1051

atagatgnac annctnactn ncgaaaaccc cgnocnccggg gcagaggcgc gntcaagcat 60
anggtctttg gtatttcgtt atggcggcga aaatatatcg ataatatatn gggattgggg 120
tataggaant ganttaatat tttattggaa acaaaagtgtt aaaatagttt tgcttaacta 180
ttatttatta aataattatt atgcatcatt ttaaaatcag tcatcattca tcataaatat 240
cgatattcgt atttcaatat atcgcacacc tcaattaatt tatgtatcaa ttatattgat 300
tgantttttt gcgaatttct cagttatgaa aatgcagcaa tgccctgtgat agctcttcct 360
agaataagtg cgtggatata atgtgt 386

<210> 1052

<211> 537

<212> DNA

<213> Ctenocephalides felis

<400> 1052

cctctctcag ggtaaagtga tatgagctga tttggtttca tttatgcaaa tcttccattt 60
ggcaagccac atttgtagtt tattgatatg ttcttgcggt tgtcgggaag cttgatcagc 120
actgtgatta tttttaaaagg tttaacttat cgaaatacgg aaaagtcaaa attcgatttt 180
ctgaaaattt cacactaggt gggctttctta atataagggt gtagtgaccg aggtcgctaa 240
cgcgcgacc tatgtggatg gtgtcaagtt ggacggacct gtccaagggc agtagtgcta 300
cacattgnat atatgtatta ttttgtatta attttattca attacaattt aaaacaagct 360
gtttgaaatg aaacctttgc ttccatattg tttactccag aatctaaaat tatgaataaa 420
tgaatattct agtgaattat ttgtaaaagt tcttcttcaa cttagtatct aaaatacaac 480
aaacaaactg cgcataaatc gagaatatta ttagacatca tgcagagtcc ctgccgg 537

<210> 1053

<211> 331

<212> DNA

<213> Ctenocephalides felis

<400> 1053

ggtctgaaac actttcaaac aaactcagaa ttatcgatga tattttggaa atgcaaaaaa 60
tggtctgatga gctaataatta ttggcacctc ttaaatcagt cgtaaccatt gaaacacttc 120
gcaaaatgtc aaaaaaagga ttgacttatg agatacttaa aaaagcttac gaaggaaagg 180
gagaagaggg ccttgaacaa attttgaaaa cttaaagtaac aaaggcaaag cttactataa 240
acaatgttgt ggtgtttttt caaaaacatg caaatgatgt ttaatgaccc ttatttatca 300

gaaatatatt ataaatattt aacatttttag t

331

<210> 1054

<211> 344

<212> DNA

<213> Ctenocephalides felis

<400> 1054

cagngattca tttcatattg gtatacatat ttctcaatat gncatttttc taaactttgt 60
gggacagnaa tataccaagt tccttcogta attgntcatc tccaatattt ccattatgag 120
gaatgcttct aagcattttt aaataactgn ctggnaatcc agattctaac gctccttgaa 180
taattgnotc aaganatata aaactaggct tcctatcttc tggaaaaggn tcacccgggt 240
gcaacggagc aggcagttta ctttgctcat atattcggca cgatacattt tcgccactct 300
tagttttgat gnttacaatc ttagcaaagt atgtgtttta atgt 344

<210> 1055

<211> 264

<212> DNA

<213> Ctenocephalides felis

<400> 1055

cccatattga acatttattt ttagcgacta cattagaaat gtaatagata aaaatgttat 60
aaatctgcga atataaaata ttgtattttc ataaagaata ttattattct ttcttatttt 120
ttgttcatag cagaatattt ttttcgcccc aaaaagccga cataatacac cactaaagac 180
ttgtcgaaag ttgtggcgtc cgggactcgc aaattcaatt tgtgcacaat cgcgcggtga 240
aatgcacaat ttccatttct atgt 264

<210> 1056

<211> 647

<212> DNA

<213> Ctenocephalides felis

<400> 1056

tatacatatt tcagtgagan atcagcaata gtttatgatt ttattgacgt tgtgaacgga 60
catgtgntct gggngtttat aaatttgcgt atagaaacaa taataaatta cagtacataa 120
tactgatttg attttactac cgnaacgatt tgcttcagat atttccagaa aaatgttagt 180
tttcatacat tttatttaat ttaatatctc cgacttggtta ttactaagcg aaattttctc 240
tcttttaaat atagaattct ttatagtatt cataatagtg aagctttaaa gtattttctc 300
cactatcacc cttttttata caaacgcatt ttgagaagta acgtgaaagc ttactttcga 360
attggtgatg nttctatgaa tacttatatg tattataata tgnattaaat tgaatttttg 420
cgtttcaata gaacttcaat cataaaatttg aattgggggt aatattggtg ggggttggtg 480
tattaaaaga cttcgatatg aaaaaaatca atgggncatc aaatcctagn aggatatttt 540
atgnggatac ctagcaccog caatggnggn aaatggcaaa aactgggatg accccgattt 600
ttgacgaatt tttggtgggc gatggtgnaa actaaaaatt tntcgct 647

<210> 1057
 <211> 499
 <212> DNA
 <213> Ctenocephalides felis

<400> 1057
 ctcaatgaaa tncctattnt gntctttttc tgcttttacag gatttaatgc aaactgnngg 60
 catannnaat tggaataact caaatcangt taaatgatct atttcagata aattattaca 120
 gtatcttttc atnctaaaaa ttntatnccg ctntacgcan ttttaaaacg gtctctgatt 180
 attttaatca tnatttgtaa taattaatatt aatgcttatg caagcattct nataatactg 240
 taatttaaatt attgnaanaa ttaaatgttt ntaggtttng gactagtgtg tataacagat 300
 aaattaatat attattgtng gattgtatatt aatnntttta agaataattaa natcagtgtt 360
 tggnttatat agttngcaa tncgtcttaa agtacctggg tatttttnatt tatttttagga 420
 tcattatgaa gcaattgcaa ananttatatt ncaaattttta atttataatnt tttttgacca 480
 ngtgcccaatt tacttgnc 499

<210> 1058
 <211> 310
 <212> DNA
 <213> Ctenocephalides felis

<400> 1058
 tttttttttt tttttttttt tttttttttt ttaatgattt aattaattta ttntaagcca 60
 ataattgata ttaattatgc attaatcatt gnatttatac tttcctagaa aactatacat 120
 cacatgttga aacaaattaa ggttcattggc ttctcgctt tccttagcgc ttgttttaaa 180
 tttgatccat tctttccgaa tcttgttact ntttggtccc catttntcat tgggagtga 240
 cacgtttttc aatgtatcat taatggaatg ttttctattt ttcaaataata tccaaattgc 300
 ccaaagnggt 310

<210> 1059
 <211> 215
 <212> DNA
 <213> Ctenocephalides felis

<400> 1059
 atctacaaca gcaccgataa cggcaacaac tttnccttgg gcacctgctg ctgctttggc 60
 agcataactc ctgctgttcg ataaaatoga tgcgatttta cccgattctg ttttgctcag 120
 ggttcgcaaa gtggaattga ttacggagtg catottgtaa taaaatgtat agccagtga 180
 gttgaattaa attgatctca cctgtaagct actgt 215

<210> 1060
 <211> 275
 <212> DNA
 <213> Ctenocephalides felis

<400> 1064

aattaaaatt ttctaacatt cacaaaattg ntnntcaaan tccgaacgat attttcaaac 60
aataataaat taacaacgga cttagcaatt ataaatatta cagctcacta ctacaaatta 120
catattttta tcaatcatat atatatatat atagttttgg tttaagatat ataacaacaa 180
tgtttctatc gcacatatca ttaaataatac tttcatatgc gacaagacaa gttttgcatt 240
aaaaaaatat atgttactaa tgacaatatt tagaatcaca cttgaagact cctcctcgga 300
gcctncgggg ggcgccgagt aaaacaacaa tgt 333

<210> 1065

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1065

agtagagaat tgacagcagc nattgctgcg gaaaccgcac tcactgaact tcagcagcaa 60
ggaaatgatg ttctcatggt tccatttata acaaaatgtc agctgccatt ggaaagtttt 120
cgattgttaa aaaccagcaa agccatagtc aataaaagaa gtttgaaata tcagattttt 180
ctgttcgaga atttaatact gtttactgaa cctactattg tgaacaatga agagtttttt 240
acctgcaaag actatatatc tggatagaat tttaccacct gtcgaatgtc agaagtcttt 300
atatgcattt accctgacga gttcagaaaa taaatctaga attttccata taaaatgctc 360
aagtggcgat gaaaggatcg tccctggatg actattatta ggaatatttt gtttcagcaa 420
caacaggcat gggaaaggaa gccatngaaa aataaattag ctttattctn ccgacaggag 480
ggcttcacc caanaacc 498

<210> 1066

<211> 264

<212> DNA

<213> Ctenocephalides felis

<400> 1066

aaccacgagc attcctattg ttaatgtcgt gactgacgta gcatcgatct tcgtttatct 60
tgcagactgc cacttttagct gccaatccg cagcagtgtt gcttgtgcag gtgtcatcat 120
tttcgttgca ttttacacat ttcaggggat catttttatt acataggta ctattgcact 180
ttagacaaga cccagatgtt gcattttcgc attccttttct aatcgaatca gtttcaggta 240
aatcgaccaa acaacctttt tttg 264

<210> 1067

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1067

tgtgactcat ttggagttct tgaagggtgt tcttctaccc aagctttatt agatccctgc 60
atgctcatgt tcaagctatg accaggtgga ggaatgttcaa ttatgtcgaa ttgagagtta 120

cattgcgcac tcottacacc tagtgagttc agaactgtta tattctcagc tcctgatttt 180
 gtgaaaagca tatattcttc taaaggntnc atagtatgat tgttgacttc aatatatata 240
 tttgagaggc atcctgaata gctttttgaa tgtagcaa atctgggatcat ctgncgataa 300
 accaccgatt tgtatttcat tgattccttc ttaggagatt ttacaaaatt gacttcgggt 360
 aatatttcta aagatctttna agttctgtct attaacaata tgggagcctg ttgngatacc 420
 cttttggnat nagacgggaa tgcttagcac cgttttagaa aanntttctn gttaactttt 480
 ngcttccaaa cacaagac 498

<210> 1068

<211> 422

<212> DNA

<213> Ctenocephalides felis

<400> 1068

taacctctaa tgacgtctta acacgtaaga caaggcaagc agatgatgct ccaaagaac 60
 ccgatttcaa cctagctaaa gaatacaacg actcctaccc ggtgggtttt aacatcattt 120
 tatggttcgg agtagccttt ttcttctcgt tacttgctat ctgtatctcg atctccacaa 180
 tggaccctgg cagggactcc attatttaca gaatgacatc cacacgcac aagaaggaga 240
 attaaagttt gcgaaaggag tgttttta atgttaaata ttgttttagta ttattacaat 300
 gtaaccgagt tattaatttg tgatcaatat aaattaaaaa ttaaaatata atatctttgt 360
 tgaaaatcga attattgntc tattatattt tttgttttac attcctagta ttaccgaatt 420
 gt 422

<210> 1069

<211> 288

<212> DNA

<213> Ctenocephalides felis

<400> 1069

catagaaata taatggaatt ttacttttaa cattgtttat aaactatact ttacaaatta 60
 attgtaatat ataaatataa ttatattatt tcataaaata tttgttctct gactagtgtta 120
 gatgttttcg tgctttctaa ataagggaag ttatatagga ctgtatgcct ttctgtgaac 180
 aactctatgt atgttcta atttgttagga tttattttta taaaaatgaa tatataaata 240
 tataaccgca ttaaaaaaaaa aannannaaa aaaaanaaan aaaaaaaaa 288

<210> 1070

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1070

aatttacaat cagaatcaat cttacaatta gtgtagttgt ctatgagaga aaacatcggg 60
 cggttggtcac aaaatgatta acagttatag aatgccatgt gtttaatacag cagtttaca 120
 tataatgtta ctattgttag ttggcatact gtaccgagtt ttattttttt tatgaaaaag 180
 aagatagagt ggccaaatta ttttggtcat gtgatatttg ttccattaaa gattatatga 240

gggcatgtgc attggtaggt gcatgattta atatTTTTgt accgttgcg aattgatttg 300
 tgggtggagat actgtattaa agngtttcaa atagttttga aactgctctt gtgtgaaatt 360
 tagtatagtc cccaattcaa tctaagangn cttgggtctt ccctttatgg tgtcagcaact 420
 tggataaact ttattctacc ttatccantt attttagtta nnatgctccg ccccttnggc 480
 cagnatantt tgaaccga 498

<210> 1071

<211> 269

<212> DNA

<213> *Ctenocephalides felis*

<400> 1071

caggattact aatgnccgcg tttccactgt tncagnnatt ccgnaaacca ncnaccncgn 60
 atatnaatat gaagctattg gtnaatggc aataaatgca caaattattt cacaaatccc 120
 gcatgagacc atnacgaata caagaattgg aagctttccc acagaggtaa taatagcacc 180
 tattatggga aatcaatcgc atatncagct tncaacatta aaagaatgca taaatgcctg 240
 ntctttcatt gngtctttac actcggncg 269

<210> 1072

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 1072

aagatttaaa caatatgtaa aatatttatg tcttttaatt taaaatgaat ttatangttt 60
 ttactataaa ctagttaatg aattatataa atattttaaa tattgttaag cactgggttaa 120
 ttttcgtata actgctatgc aaaatactgt tagatttgaa ttaattttac tgaatcaaatt 180
 gaaaaaaagc aaagaaaacc agatacttca agtaaaactac acgtaaataa agaattgttg 240
 cataatatga tattattata ctcaaatgt tcttttgtgc gaagtaattg acaagttttt 300
 tgaatactaa acaggatagt aaaataatat gtatataata attatatgca catttcttaa 360
 ataactgatt agttgncaaa atcacacgaa atggtagctn cccaatattt taaaagctac 420
 ctaaagtact aaatccctct ggtcggaagc taagtagcat caaacatgt ttncattattt 480
 acggtaaaat taacatta 498

<210> 1073

<211> 498

<212> DNA

<213> *Ctenocephalides felis*

<400> 1073

aatgnttnca gatccagccn ccnaagaagc ggnttgnttg cttaaacna tnggccaaat 60
 ttgagatacn agctttgagc gantcagagt tttcttgga aatgttaatg gtaaaatgaa 120
 aatatgaaaa atttcgcaat tnggacaaag attttcctaa catagaaata ttttgctgnt 180
 ttatgatagt aaattatttc ataattagna atttaattat attttaatat taattgggta 240
 ataacatgcn aattaatcga gaattgnttt aatgnttgat attttaacat taattgnggn 300

tgggcagata tttattaatt atatgttaag ttcgcgtntt tgctttttat ttaattaa 360
 ttaagattat tatattcctn atcatgggtt aaaaaaacca tgnnttcatt naagggcnaa 420
 gtacccaag ttttngntta acaagggtt ttaaggnta ctgcagctan gcctcngtat 480
 tacatattcn acacttct 498

<210> 1074

<211> 437

<212> DNA

<213> Ctenocephalides felis

<400> 1074

caagaaacaa gcataagatg gccatggcaa tgctatttta tgaggcagaa ttgccatgtg 60
 aagatttttt tccccgaaca ttatacaaga ttttccactt agattttttt tattacgata 120
 gttattaagt agtcggcatt tctgtttag tagtagtaag tagtagaaaa atatgaaaa 180
 aatatttgca atttattatc aaaaactcta atataagtcc cagatttttt tatctaattt 240
 tgtttattga tcaataatta ttattattat tattgttgtt gttgttgacg atgaaatatg 300
 atttatatac aacaaattta tatttaaaat agatctttat aacttactga ctgnagatta 360
 ttggtaattg gnctgggtgac caattcntgg tncccntggt tccattaaat gaaaaaaaaa 420
 aaaaaaaaaa aaaaaa 437

<210> 1075

<211> 324

<212> DNA

<213> Ctenocephalides felis

<400> 1075

ttttaaccct ttntaacnt tngaantccc cnngntttcg gcnaaggccc acacctgtg 60
 tangccngct taaacttana ncctttcatt ttaaataagac aagaagtgcc attgggggga 120
 nctattgatt ttgaanaacc accattcnaa anctcttatg gaggaggaga tagttattca 180
 tattctgcac caccncccc ttcttntaaa ntgaganaca agtgctcctg cacatccagc 240
 tgattatgaa ccaacggagt atggngaata tgcttatcgt cgtggtatgg attatgaaga 300
 tacaggaagt tccgctggaa gtng 324

<210> 1076

<211> 497

<212> DNA

<213> Ctenocephalides felis

<400> 1076

gaaatatgat aatatgttca aaataaaaat gataaaaata aatgagtgga ttatcaannc 60
 aggatattaa acataataga aatttttttt gaaagttagt gaaatttttt aagaaaagg 120
 taatgacaaa gttgaattaa ttacctgtat gtttgaatat ttgttagcac ttttgcacta 180
 aacaagcttt ttttaacaaa atgattttgt gagttaattt tccgccgaat aattagattt 240
 tgtaaataca aaattactaa aaaatttgtc ttttttaaaa ttattatttg aaaacacgaa 300
 taatattgtt ctctggatgt tgttcgattg gttttogaaa attaactaaa tgaaactggt 360

gtgccctttg tacacgtgta acacttgacg agagatggga gatggntggg gngngttttt 420
 atatgtcagg ggggaatact taaattgtgg atcttaaaag gaagtcgtat taattgtttg 480
 tcaaaaagtg aaaaaat 497

<210> 1077
 <211> 354
 <212> DNA
 <213> Ctenocephalides felis

<400> 1077
 ttttaaacc tttttnaacc cttttaagtt ccgcgnaggt ttccgcccga ggncccttna 60
 attggtaaat atttataaac tacnttttta attttgttca aactaatttg gatannggnt 120
 tacgnntaaa gctatatcaa nttggataat aaattattgt aagaatttac tactcattta 180
 cagcataata tataaagcac accataatat aatattattt tatctataat acaccatggc 240
 tgttaaaaac accaaattta tattctcaaa tactaaccac atacaatcct gattttaaatt 300
 tgtataatat acgtttcaac tcaactaagt ctatcacaag aaattggacg tagt 354

<210> 1078
 <211> 387
 <212> DNA
 <213> Ctenocephalides felis

<400> 1078
 ttgntaaacc cntntnaacc ctcttggaan tccccaannn tttcccngc agccccnaat 60
 aatnntactt cnagttaacc tancacgatt atntttataa tttttttgnt aattnnangg 120
 tctgggnctn gatgtcacct cactgnncat atgaaacaaa natgtgacgc tctttataaa 180
 tttatcacta ccttatctat aatcatatca cctcacataa atttcatacc atggttgtat 240
 ttacaaaatt cagacagtag ttgcagagat gtattcgaaa tttgaatcat taaacaaaaa 300
 tattttgata aaattgatat gtctctcctt aaaaaaaatt gaatttctca tttataatta 360
 tttcttgntc tgggcatatg taatagt 387

<210> 1079
 <211> 467
 <212> DNA
 <213> Ctenocephalides felis

<400> 1079
 cgncaccaat gggttttccc naaatttttn ttccgncggg accnggnggc aaaagtgnaa 60
 ccgttttttc cgnccgagga gaatggnaaa aattttnttc atggtttttt gggtnaccac 120
 caatnggcaa taaaaccttt tggttggccc aatnggctng ccctttgtta aaccgggggtg 180
 cgngcatccc ccccccccg cgaagnatgc aaagtggaga atggttaagt agggcttaac 240
 ccaggaaacc atcttgatag actaatnngg ttcaattatc ataagtagtc attatttata 300
 atccacaatg actggcatta atataaaaat tgttaaaatt aaatgttaaa tgttttatgt 360
 angggccaac aaangcatatc ntgtattctg gtattaaatt tantttgagc ttttgatctg 420
 ttttttataa ataacgttgc cgcttgaaaa aaaaaaaaaa aaaaaa 467

<210> 1080

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 1080

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annccnccnt caccgaangg gtttgcccca aaatTTTTTT tggngcngaa cngctngca 60
aagggggnaa ccgtTTTTTt cgnncnagga gntggtaaaa atTTTTTcca tggTTTTtng 120
gttaccanca aangncaant aaaccnttat ggntngtcca aanggcttgg cncTTtgnta 180
aaccggagtt gcgatgcatn ccncnccccc ccggcggaag aatgcaaaag tngagatgct 240
aagtagggct taaccagga aaccatcttg atagctaatt nggatccaaa tatcataagt 300
gtocatttaa tataataatn cacaatgact gngcaattaa tataaaaaat tgtttaaaaa 360
ttaaagtatg aaaatgtntt ttatgtangn gcncaccaa aatggcatta ctttagtaat 420
ttcgggtttt taaaatTTTT aattttgaag cttttggaat tncntgttct tttataaaaa 480
taaatacgtg                                     489
```

<210> 1081

<211> 386

<212> DNA

<213> Ctenocephalides felis

<400> 1081

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nacctcnttg gatttgcccc aannggtttt gggccaattn ancctttcnt accnttnnca 60
aattggnncg gtanttnccg acggtTTTTt taaaccaata attaaggggc caccgggntn 120
ncanttntna antnttccag ctctancnc naaataccat atttnttca atcatntatn 180
tntntaatTT aggtttgggt ttningaatt ataccaccaa tngtttctat cggcncattt 240
aatnaaatat cctttcatta tgnccgancaa ggacaagttt tgnattaaaa aaantttntg 300
ttacttaatg gacaatattt agaaatcaca ctttgaagac tccttcctcg ganccttccg 360
gggggcgccg agnaaaacca acaatg                                     386
```

<210> 1082

<211> 436

<212> DNA

<213> Ctenocephalides felis

<400> 1082

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gaattngnca ggcagcantt ggcttgccgg aaaccctgcc tcnctgganc ttcaaccagg 60
nanggaaan ganggttcct catgggtccc atttttaaca aaaatgtcag ctggccattg 120
ggaaaggttt ccgattgggt naaaaaacca gcaaagccat tagtcaaata aaaagaagtt 180
tgaaaatatc agatttttct gttccgagaa ttttaatactg tttactgaac ctactattgt 240
gaacaatgaa gagtttttta cctgcaaaga ctatatatct ggatagaatt ttaccacctg 300
tcgaatgtca gaagtcttta tatgcattta ccctgacgag ttcagaaaaat aaatctagaa 360
ttttccatat aaaatgtcga agtggcgatg aaagatcgtc ctggatgcta ttattaggaa 420
tatttgttca gcacaa                                     436
```

<210> 1083

<211> 497

<212> DNA

<213> Ctenocephalides felis

<400> 1083

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atntttngnt nccatngctc aangggcgnta ttggccccnc agccggggcgt ccaaaangct 60
ncntngtccg caccgnctta ntogtttggc angattatcc ntgtttaatt ttcgcctttc 120
gtccccaaaa tcttttggga tcttgatcat gtaaaagtgn tttaacggct ttgcttcgta 180
tgcatgcagg tgcattatct acgagaagaa aaaaattggg tgctggggga gagttacaag 240
atcttatgtc gagactatgg gccatataat caatgggtgg gggctggaga ggatctgntt 300
taagcattgc tgaggatctg agaaatcgta aatatncgat ccattcatgg acaggagaag 360
taatgattnc tgagatgcat ggctatggta aaccatccgc attataaaaa gnggttgccn 420
ccgcgtncnc ccatacatt gntgtcaatt attnactggc tncatgacaat gctntggcgt 480
tccaagatnn cctcatc 497
```

<210> 1084

<211> 281

<212> DNA

<213> Ctenocephalides felis

<400> 1084

```
aagtgtact gtaattgac cnttttattt taaattacag ntanaaatc cgnnaaaatc 60
ttnacccgat gatatacaaa aaacgactta taaaaaatta ttaaagcaaa tattgntttt 120
actcttagac cgcggacaat gtgccatatt gttgtaatgg atttttgata gaaatgtagc 180
tttaaaaaaa aacatcttga ctcggnattt attattatta aatcatcaat ttgtgtgctt 240
tacaactaag ctatatttct gatccaaaat gcaatactcg t 281
```

<210> 1085

<211> 489

<212> DNA

<213> Ctenocephalides felis

<400> 1085

```
tttttttttt tttttttttt cgnntttccgc atntccacaa gccaaaacca agcctgngcc 60
agcattaaaa acccaatcct tntcngttn tttcagngct atttcanata ttaactntgt 120
ttntaaccgn ntnaatacct tttcaggatc gcgtatggcc tcatttttgn gtgtnaacct 180
gnggncaaca tcgccaatcc atgttaccaa tcgatcctta cgattagcaa acatttcacc 240
gagtcccaaa cgttntnta acctatggna ctgnatagct aattganggc aanancgcca 300
tgctgttgcn cagaatccaa accattngat ttattggttt catatctgnt ggactaacgc 360
attcttttag ttggtcttga gaaactctaa atcttcaaag ttgggngnga gaacaactaa 420
acgagngccc tgaatcgnaa attntccaaa nntnncnt cccggtttta naaganggga 480
actgngaa 489
```

<210> 1086
 <211> 389
 <212> DNA
 <213> Ctenocephalides felis

<400> 1086
 ccnggccagg tccattccag gangtgggaa cctttttaag gaagnctcct nanggggggc 60
 atttncccn ngggggaccg ggaaaaatcg cccattagct tgggtcggnc cctggccnat 120
 atgtaatngn ccaagggggt atccccctct tgcaatgggt gggagggttg ctgggaaaaa 180
 ggtactttac tcctatcttc tcaagactgg caaagggtatt taaacttctt tagttggaat 240
 ttgggggata ttagattaga aatataatgg aaatgnga atagaaaaaa aattaaatat 300
 acaatagtat tttaaattgg ccacatctat ctatgcatnc ataaataaag gtatatacag 360
 cattcaaaaa aaaaaaaaaa aaaaaaaaaa 389

<210> 1087
 <211> 499
 <212> DNA
 <213> Ctenocephalides felis

<400> 1087
 tttttttttt ttttttttgg taaaaaattt ttcttttatt aaantgnntt accaccana 60
 taatacctct ggcntaaaat tggaattat tctaacaaaa gtttggggnt atggcatgaa 120
 tgccacttaa cactaccagc aattttgtct cagcataaaa tttcataaat agaggagctc 180
 aaaaagacaa aataaccata atatagtcac taacattaac aaaaatataa tattatctat 240
 taaaaagnaa agcaaataa atctttgaaa aatattctta cacacactca catatatatg 300
 cctttgcata gactccgaat ggagcgagat caaaataata acatgggcat catcncactc 360
 aaagacaaat agtataataa taatatgcgg gtaaatatca ttcattcatt tttttttttt 420
 attgccggtt atccngggcc caataataaa antnaatttt catattaaat ttaaagncaa 480
 tttggttacc gnngaagga 499

<210> 1088
 <211> 303
 <212> DNA
 <213> Ctenocephalides felis

<400> 1088
 tttttgggca aaaagactaa caattaataa ccaacacata ataaaaataa attgntggga 60
 tagaaaattg attcaatttt ctactcgatt aacaaaattg ncctttatct gattatgngn 120
 tgggntttat tatatattat tattaatatt gatcgatgga ttttaattaca ctgattttgc 180
 atttaagtga gtttatccta ttattggttg gttttggtat ttaattaatt gaccagcgtg 240
 agaagaactt tcttgnagtc tcctgatgta tcgncggaga tcagctctcc aaactctttc 300
 cgt 303

<210> 1089

<211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1089
 acctaattatt ataattattaa aaacaaatca ataaaaataaa tagcaaagta aatttttagtg 60
 ttaacttttat aaataccaat catcattttt atatgatttg tataaaaaact tatattccat 120
 aaaataattt atatatcatg aacatagaaa gtgtttatgt atcatttcat tcttatatca 180
 atctaaaaat tataatatta tgaaatataa attttagttg taaaattgaa atatgtcgag 240
 gttataaatc ataaaaaatt ataataaac tataacctct aaaatagcat tgccaatagt 300
 ttgtttatat aaacttcttg cgatcgaaact tcttttcgtt catttcccga gattaaacat 360
 gaaaagccca cggttttcga atgcattgaa taaaatgatt tgcttaatcg cagcctaata 420
 taatattcat caggctatta tgaaaatatt ggatacaatt tttatataaa accattctnt 480
 agaaccatta gaaaatat 498

<210> 1090
 <211> 499
 <212> DNA
 <213> Ctenocephalides felis

<400> 1090
 ccccccgag ctttcnaatt ggtaatggtc gggactggac gtngcatcga tctttcgntt 60
 tatcttggag actgggactt ttagctgccat attcccgag cagnggttgc tttgtgcagg 120
 nggtcatcat tttcgttgca tttacacat ttcaggggat catttttatt acatagggtta 180
 ctattgcaact ttagacaaga ccagatgtt gcattttcgc attcttttct aatcgaatca 240
 gottcaggta aatcgaccaa acaacctttt tttgtttcag tgccgntaac atagatgtaa 300
 cacaatcctt cacatttttt ttctcccccg catccgttga catgacgggc gtcgaaaac 360
 ttattattgc atgtagcacc gcacaagttt tgcaaagagt attgncatcg cagatatcct 420
 cgtgcgcacc ctgcattact ttacctttc tagttagcgn agcataatct ccattcatat 480
 gctaacaatc ttgcttcga 499

<210> 1091
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1091
 cctggctaen nttaaagtgc ttgggattct ataaaanttg gnttttaaaa aagctggatt 60
 tataatacaa agcaggggctt cnttttcgat ttgtcacata tatattaact tttttcaaat 120
 caatttatct atgcatttag tttatccatt ttctaactta caaaatataa ttctaaatag 180
 ttcaataagt aacagaatct aataataaca taaaataata atatataacc tctggacagt 240
 aaacatggta gagattttta aatgacaaaa cacattcttg aaaatgaagt tcaaaacaat 300
 atctagtttt gatcaagagt ttctttgggt atgactaaag ttttcaaaca tcacgtaaga 360
 atggnataaa ttgacttgaa taatgcttcc tatcaatcaa tttttatgta aatcataaaa 420
 ggtaaaatta aacaggantg ctgntataaa attactgnca cttccccaaa atattatttc 480
 atctctaatt accatagata 500

<210> 1092
 <211> 308
 <212> DNA
 <213> Ctenocephalides felis

<400> 1092
 ccccttcagt aatttctttt tattttttaa ttancgaaaa atcaganaac agttattcca 60
 aagatcatgg gncttgntgn ncttctttaa gcttatttcc taccctaaag tgttaactat 120
 tactacctaa actgcgatga tatttgtgat gaatgatgt gacatgatgt ccgaagacgt 180
 tggctaagat gcggnataat totgttcctg gtcacatcgc gttccctttc ctggtaaatct 240
 ttacttggtc ccaatcttca gcacggccgt tctaactgtg agcaagcttc gagccagttt 300
 cttcaaag 308

<210> 1093
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1093
 tatcagtatc acccttacgt gaatactcgc aaaaaatcat tgaagcacga agaacagaag 60
 caccttactt actaccaccg cttttaagcc actacgatag ttcccaaaca agacctttat 120
 ccagcttgca gcatctcatg atcgatcaaa acactttaat cgaaggcttg aaattgggtg 180
 gtgtcgatgg atcttcatta aaacaactag ctactttgc acattgccgc ataactatga 240
 acatgggtca cagacatagt tgggtcgagg ctggcacttc tttaggaagt gcttcggntt 300
 tgagctcttt aaacaacgat gtggatagcg cacaagntca ccaggattat ccaggaaaat 360
 taacacccga agaataattct ttttgtgtca tggaacgagc agtaaatgga ccaactgngt 420
 ctggacaatt actgnagang gaccatntaa cgctttgcca agcgtttana aatgancatt 480
 tntgaatgtg nncnaac 498

<210> 1094
 <211> 228
 <212> DNA
 <213> Ctenocephalides felis

<400> 1094
 cgtttttnaca gcaaaaaacc aagccttgat tggccgaagt ggtcgggtgg cttctcatgt 60
 ggattcatat aaatcaagct tttgtggttg ctttgtgatg aatgggtgct ttggttgaaa 120
 ttgntcttc atggttcatt taagattcaa cgatcctggt gaattgggnt gaaccaactc 180
 ggctccaaaa tcaggcgacg aagaagagct ttctgaatc ctctccgt 228

<210> 1095
 <211> 308
 <212> DNA

<213> Ctenocephalides felis

<400> 1095

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cctaattggng gttttangct aaccangaaa aataagggtt aaaaaaggnc naaccttnaa 60
atgggataaa anccattaaa atcantttct ttancacatt ctagtcacac actttgatcc 120
gaaaggttgc cccgaatcgg cagaatttat gaattttatt ataaattcac aatgatcgca 180
tcacataaaa ttgnctttta atctgnnttat cttgcaggaa aaatatcgca aacacgtttt 240
ttnttggtt ctaactcaat atttaacaca cgtaaattat cacaccgtta ggcaagctga 300
tggnctgg                                     308
```

<210> 1096

<211> 335

<212> DNA

<213> Ctenocephalides felis

<400> 1096

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ctttctttta aattgtaaca tctatatcat gaaatcatga tcggctccot ggtttatttc 60
taccgattac tacagtatta tatttataat atgttcaata tagcactgng gtccaatttt 120
attttgacca aagggtttata taaaaatcca ggttttcttg atcatgtaa atgntgggtcc 180
attatcttaa attattatat tcagaatgat atataatcca ttcaactttc taaaacaaac 240
aagaaatctg tgcaacgtct gatatctgng aatatgtatt ggatttaata tatatgttaa 300
gngnttaaaa atatatttct atttcatata cttgn                                     335
```

<210> 1097

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1097

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ccttagacct ccaaattcttt ttttaaggaa aaatcccccg gaaaaatagc ccttnocatat 60
tcgcctgnt tatacttggtg acaagnntaa aggatttaat ttaagcgact tctgtattta 120
tgtaattcac ctactctaaa ttaagactgn aatttatcat tatctgacat agtttttttg 180
ttttacgtat tttttattaa aattcttggtg aagttcaaca agtagaatat tgntttttta 240
attgggttat ttggacctta gaatattcta aaatactcta ttacataga gagagcaaga 300
tgcttaaatt tatacaatat gtcgagtaaa accaaaaaaa acgtaaactt gcatgctttc 360
tagacatgct gctataatca taaaaaacag ttttgccatc ttgaaataag gcagacttat 420
attatataca ttaataatgg ntcgacacnt attgtgntca ttggaatgaa ataatacagg 480
nggaatataa ttttcttntg                                     500
```

<210> 1098

<211> 392

<212> DNA

<213> Ctenocephalides felis

<400> 1098

cacnntnttt ntntaagttt tttccctgta aatngtaa atgantttgg ttngngaaaa 60
tagtggcngg ggtncatggt aacaaaaact atgggacctc ttggataatt taatcactta 120
tttataatttg cccgcgtggt aatatttaag atatgaaatc tatagaagcg atcctttgta 180
tgacaaaagt gacattgtta atcatatata caatgatttg cgacatatgt tatgggtgcta 240
tttgccctta aaaatctaca tgtgtagtga atttgttctg cttctacgtg ataaatgctt 300
ggatatagng tttgatcttt ttataaatat catatatatt ggattaaaca atcaaaagaa 360
ataaaaatgt aaaaaaaaaa aaaaaaaaaa aa 392

<210> 1099

<211> 362

<212> DNA

<213> Ctenocephalides felis

<400> 1099

tttttttttt tttttttttt ttttttcant tttctatott ttattattta agccataaat 60
atatatatag tataagnata ggctaactac cttttattat tcccgaaacc atttcaataa 120
tttcaactat tcttagattt tcttttattt ctcagacaaa accacatatg cttgttaatc 180
tcaaaacgaa taattatcat ttttgtttat gactatataa ttatacatat gcgggcctac 240
ttagtattca naaatacttt atacaggag cttatcattt tagataatat cattcaattt 300
tggtatttgn attacttcaa taaaaataac acctaataa ttttttcaat tgatgaaata 360
tg 362

<210> 1100

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1100

caangaatat angggttttt antggcacca taatggcttt taaacttggg gttggttgga 60
aaaaaaaatt tgggttgag gggataaccg ccanttttag gattcaaat acctccgcca 120
atcacacaaa aacactttta aaattccttc taccagaaaa aaaaatggca aaaagaaaaa 180
cacgttttta accagttaca ggagtgnatc tctcaatcc aatgaaattt tatgcagttc 240
tgttcaaaat tatatctgnt gnaatatatta aaaaagttaa acttttgctt aaccaatgaa 300
aataagatct caatagaaga cttaaattaa atatgatagt gatcatgagc atatgttcat 360
aaatcaactt tctgattgat tttctatgat aaatgcattg nctacactat ttacttacta 420
ctacacgggc cttacaggaa tgnatataaa taaaatgat catatattta tattcattgn 480
gggaaaccgg atttgga 498

<210> 1101

<211> 319

<212> DNA

<213> Ctenocephalides felis

<400> 1101

ctacntnaaa ggggggtggct tttcttaagc agntggcata ncccaaggca gcacccactg 60

caaanggtc ttataaaaaa naggtatttc tttggcaatt taaattcttt ctttcanctg 120
 taagaccctg gataccatt ttttttggct tttcttttga tttttcttta agcaattccc 180
 tctgctttgt caattttcct atcaacaaat ctctcaattt tatccattaa tttaggagtt 240
 tctccagtaa caagcctctt caattttatc tgtcacctta tcagcctttt tagttacttt 300
 atcccagtca atagaaatg 319

<210> 1102

<211> 283

<212> DNA

<213> Ctenocephalides felis

<400> 1102

ttgggcnttt ggtnggtatt ttaanaacaa gaagcatttt nttgggactt ggacttttca 60
 ctactcataa gaaagcatca aaagaaaact gggncctgggt attttgggtg aggggttggga 120
 ctaaataatca tcgatcnggg gttttactta aaacttttcc ctcatatcct taaaaatctc 180
 ttgatgggct tccaaaactt gtccgagaat ttcacaaaag taacctccgt tccaaaagaa 240
 ctttttgtca aaacacgtgg ggttaaaagt gcaggtcaca agt 283

<210> 1103

<211> 287

<212> DNA

<213> Ctenocephalides felis

<400> 1103

tatcaagcaa actgaatttg atctgaggta aaactgaatt caaganataa aagcatcacc 60
 nantatgtat agataaaaaga taaagattgt aaaaagtgtg agaaacactg tttggatggg 120
 gaaacgaaat atagaaaaca caaaagttaa aatatatata tactcagccc caaataatat 180
 aattttaa attggttaag tttgtttagt agctcagtg taatagcatt agccttgcaa 240
 ccagaattgc agattccatt ccttcattaa acctgatatc aagcagt 287

<210> 1104

<211> 434

<212> DNA

<213> Ctenocephalides felis

<400> 1104

accatatcnt atttttggan taantggaat gncattta attggtacta atactttctat 60
 ggaaattcat tttttaaata aggtggntta aataaataat ttcattgnaa agncacatca 120
 aaacttttct ccaaatatag ntctataata tttagttttt agcctgntat cactattaga 180
 ttaaattata aattgnttgn aattggctaa ttgnaaagng nttataaatg aacttttgnt 240
 gncatttgnt atgaagatat atgtattttg aagcatatit tttgtaacat tgtgcaaagt 300
 cttatttgtt tgggttgnat aggaaaataa ttatgattct tattactcat taaactataa 360
 taaatttttag cccatggtaa acattacaat taagtatcta tttagcaaaa aaaaaaaaaa 420
 aaaaaaaaaa aan 434

<210> 1105
<211> 498
<212> DNA
<213> Ctenocephalides felis

<400> 1105
ntttgagccc ctcgngtct tgaaagcccn tnaanggggc cccgggcggg ggaccaagcc 60
caaaggntta tttggttctt tcnacnggta atcaaaaatt ggccttttat attttaaaan 120
tgataantt aagntttant anttggcccc cgganaatcg ggccataaaa aaaaaaaaaat 180
ggatggatgg tttttaacnc ccnaattatt attataccat ttggtctttg ngggggggang 240
aatgcncctt gntattatct tggaccccgcc ccccttcggg ggctatgcca agggntatat 300
tgggaggtgg ggggnaagaa ttttttcaa anantatat ttgctttacc ttttaataga 360
aaatattata tttttggtaa tggtaaatgg ctatattaat ggggtattttg gtctttttga 420
gccnctatt tatgaaattt atgctgggac caaattgctg gnagnngtaa gtggngcatt 480
catgcntaa ctncacac 498

<210> 1106
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1106
ggnnnttttg aagcccttnn nnnaaangaa gctcttngnn agctcnaatn ncgttnggcc 60
gaccggcccc gtncaacagt ggcattggacc ttggccttta acggtcantt ctaaggatgg 120
gggttnttta ntcttggggg gggatatggc tttangggcc tttaaattctt nctnanganc 180
ccaaattact aaatcannat ncaagccttn tttggnttgg cctttttangn catccaagcc 240
agntaatttc gcangggccc cagataataa acgagatcat catgagcttt aaagnccttt 300
ttaaaancac cggggccataa taaanatatn caaactggat accaacaatt ncaccccaag 360
cttttaagga atcaaggngg acaccattgn acaggccttn antgcacaag tggaggngaa 420
tgacactgct tncatatcat atctttgttt tcaaagcttg cataattttc tggatacctt 480
cttctctaag gggggacgca 500

<210> 1107
<211> 370
<212> DNA
<213> Ctenocephalides felis

<400> 1107
cctaccttta ccttctcaact tacccttacc tacgctttac cnacccttnc cnacccttnn 60
accccgggcc tttttactgg ttactnacta ttggctaggg gntttggngc tnaatcnccn 120
ncgaagagct nctnnaagaa agaacaggca aattttggnt nacaacctnc attctttgnt 180
acnatacatt antatggcna ctactctatg gncaccnatc gnttaacaat caggcaatct 240
gntcttgggt ttgggggngc gggattgaaa cccgaatcgg gnttcgaaaa tgaacannaa 300
tatttggccn tattaatatg tggtaaaata tnccaattaa tggattattt catcactttc 360
gnaannnaaa 370

<210> 1108
 <211> 149
 <212> DNA
 <213> Ctenocephalides felis

<400> 1108
 tttttggtgn tatatcactt tcctttgcag gtgcctntga accgggcgtc ttatttaaatt 60
 catcgctttc ttgattatta tcctcagcgc tttcctgatt ggtatcgctc ttatgcgtca 120
 aagttgccaa gatcggttga ttatttggt 149

<210> 1109
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1109
 atattagtaa taagtggcca tcaaagatat taaaattaat ttgccagtc tgtttatttg 60
 gggangaact tcaaaatcat ctattacaag gattatttca agtgccattg gtagataaaa 120
 cataaagtag atatacctta atgccaggag tatatatata actaatgaaa aatgaactaa 180
 atttgaactg gatttcaaat tttgactgga tctgtaaactt tttgtagttc ctttctatta 240
 aataggatat ttgtattcac cgcattttat gacctgaagg aggtcaaata ttccaactgtt 300
 tcttttgcac aaattttatt aagtgatagt aagaatttta tacttagggc taatcaaaaag 360
 agcgggcaca cttatttttt ctaatttcat aattaaaaat tggctatatt tgtcctaagt 420
 tgnaaaggtc ttagttattg naaaattata ttatagcgat agattcattt tcattgtggg 480
 atgacttatt gattgaca 498

<210> 1110
 <211> 400
 <212> DNA
 <213> Ctenocephalides felis

<400> 1110
 tttattctat aatgaaatga ataatgntac tccaaatata atagtatgtc tttcatggna 60
 aatttatatg tatatatatt atatttatat atttgnatat atgcacaatt gtgtatgctt 120
 atatctttac atatgtgcaa atatagtttt atggatgtat atagatgtgt aagaatattt 180
 tatgtaattt ttattaactc gtttaaaatt gagtttatta cttctaaaac cacttgcaat 240
 ttgattgact ttttggatac tgntctaatt aaagtatgat gcatttttaa tatgaaaata 300
 gaaatagtta acagtaaaact aaacaagctt tgttgctagt gtaaaatgga aaaatcattt 360
 atgtttttat agctttttaa catgtttcaa tttgataagg 400

<210> 1111
 <211> 379
 <212> DNA

<213> Ctenocephalides felis

<400> 1111

caaatattgg tgcatacacag gctcatggga tatttataaa acatagaatg nggggaatat 60
atcaatcata taaaatttac atgcttcata ctagacaaac aattaaagat caaacattat 120
ttttataaca tttatatata aaattgaatg atcaaattct ttctttgcaa aaaccacata 180
ttattgaagc ataaatttag aaatcaaata aataaaatag cacaccaaac attatgttat 240
tagtttatgt gtcaaatac atattgttat aaattttgag taatatacaa ttataggcgt 300
gttttttaca tttttcattt cagaggtctt taaaacttat acaatatatt atttactatt 360
attgttaaaa cggtttagt 379

<210> 1112

<211> 486

<212> DNA

<213> Ctenocephalides felis

<400> 1112

tttttaagnc cccttnttga aagccctttg gggnttancc gtgggtccnn gggcgggggt 60
cccccaagg tggntattggg ggaaancnta ccnccaaat tttttttaac caatttantt 120
aataccttan tgggcctaag aaaaggccga aggtggtaaa ggttcaagg gttggtatta 180
gcttaantaa aaggtaaaac tttttaaaaa nggtgatgga atttatctgg caaaataggt 240
ccaaaattca aaaaattact attattaatg gnntattgga aataatgctt tttattagga 300
attggcattt tcaantctgg tatttaaaat tggnttggt aaatcaccag caccaaggat 360
cccaaccaca cantttcatc tnaccagaaa gaacnaaaat taattttaat ggttattaaa 420
aattacatta ttaaaataac tttttacnaa taaaggtaac cctacnttga gaatgggtgtt 480
ggtttc 486

<210> 1113

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1113

ccgacnggtg gaaattggca ntgganccag ccnaaantgg nngggcccg gcaaaggtan 60
taaaagaant ggggattggg cantttattg acgggggcaa naacttttgg cgaatttttt 120
ttaacacata tttttagaaa tggacatata atagttaggg tggggattcg aaaaactgnc 180
tttancatct tttgaaaata aggtatnttg ggcagncttt cggatctggc tgatatccta 240
caaccgcgc catgtagttt ctgccgctta caagttttcc caaggttttg atgagccata 300
tcatctacac aaaatgggac atcggaattg aagctctgca atngattggt ggaattgggg 360
gttctttgtc acgccacttc aaagtanaca atogtgacaa atgttcant ggtattatac 420
ctnggccgga cccgctaagc caaatttgag attcatnaan tggnggccgt ngagctgctt 480
taaggccaat cgcctatagn 500

<210> 1114

<211> 500

<212> DNA
<213> Ctenocephalides felis

<400> 1114
gctagctaca agttgttgaa atattattaa attttattat tatatttggt ttttttctgn 60
atgggggttta aattacattc catgataatt ttcagtttta tataatctaa taaattcaat 120
ttaactgttg aaatttgatc atattgtgta tatacatagc aatataaaat ataaagttac 180
acattgtctg tttcattata actgtactgc aaaattaatt attttgattg tttgttactg 240
tattattaaa gttattcaga ttcagtcaaa atttaaagt ttggcctaaa cttattattg 300
aaatattgcc aatagtgtat tattacttag caattatgta taaagatttt atttattaaa 360
gcaatattcg aatgtctgta atatcataaa ttatgtatat aaataaatat atcaatgtga 420
acaataacag agaacataag ctcaaaatca tcatactatg tctggaaaat caaatataaa 480
tngtttttag ngtaaataaa 500

<210> 1115
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1115
ttttntngtt tttttttttt ttttttttgg ggattagaaa attaatattt catttaaaaa 60
aataatgggg tattacagga ttattgtttc tataaacaaa ctacataata tggcatgatt 120
tttttcaata atcaatttga ttcgcaaatg aatottctgg ctggatgcag attttgtcgt 180
tccatccttc cttgctggat ttgnatactg cttctacaca attttctttt cctctgtaat 240
tatttgggtc accacgaacc catttttcaa aagtcattgg ctttgaattt tcaatatgcc 300
cacaaatttt gatcgatctg ctagattgtt accagctgtc caaaacattt gtttggcacg 360
gtaattgctg ttaacaaatt tctcaaattt tcatattgna atggagntca atggntgcc 420
ccctgcgtcc aagctttttt accaaaagca ttttgggtcaa ccagttcact tangaggncg 480
aaaatgaaaa ctttttccgt 500

<210> 1116
<211> 317
<212> DNA
<213> Ctenocephalides felis

<400> 1116
aggggaaaat tctttttttt gaaaactggg attctgnagt ttgcnccgg ggtggctttg 60
cgacgttttt agttccttga acgacataat cattattcat ttcttgagag tctatcaaac 120
tgattataat tgcttcgttt tcgttcaccg cagttttggc ttgttttatt tccggtttct 180
ttttagtttc aagttctaca tttgtctgac tcattatatt ttcggttaca ataagaggtt 240
cttgcggttt ttgtattaat tttgcattat ctaatctctt agtatottca acaaactcac 300
tttctttttc acgaagt 317

<210> 1117
<211> 307

<212> DNA

<213> Ctenocephalides felis

<400> 1117

taccgtattc aggtcccaaa ccatcattaa aatggtagca ttaatcaaaa atcaaagaat 60
cattattcaa attccaagga agtaaaataa aaaataatct ctttattcac ttattgggag 120
tgagtataaa tctaattttg gattcccgat gattgttgca aagctccatt agtctttatt 180
aatacatttt tattttttta tttatttgca ttgtaattgt tgattcagac accgcacacg 240
accgccgaca tggcgctgta gtcttgctcc tctgccggcc gtaacgtcaa agtaatttgg 300
ttgttgt 307

<210> 1118

<211> 374

<212> DNA

<213> Ctenocephalides felis

<400> 1118

ctgggggaaa ggnotccaac cnagnngnccg gttttgcaaa aaaccactct tggctgggtt 60
ggaattctca tctattaaat taagaantct tttgcttcat ttcaattatt ttcaaaatat 120
gattgatctc ttcttcagtt gngngntccc ggccgtctat ttcgcaacca tgcttccatt 180
ctgcagggaa ttctgatca aacttttctt ttattgntgg ctcaaaatat ctattcgctt 240
tgcgtttacc aatgctagga tttcctggag tttcataata cttattgcct aggtgatctt 300
ttccaataaa gtttgcttta atatttgctt ttccaatctt gaatgagtta taaagggttt 360
aaagacttga aggn 374

<210> 1119

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1119

tttatcaaaa atcctagttt atgagtagtg tgaagccaga aggccgtaag gtcgtgaaag 60
atctgaacgt ccatcaacat cttcaatgga tgaaatcgtc gcctaagtca agaaatgggtg 120
ttggtaaact accatttagg ttcagtcaag ttagtttttg accttaacat atctaacaaa 180
tcaattatac catcaaattg ggcattgagac gctttgctgt tcatctctac catcattgtt 240
gaactctctt cacacaacgc ctatattgtg aacgcttttt tggccataaa ctcatgaaat 300
atcatgggac aaccaacgta ttcactagat ctatccttct gtaaattatt tattgtcatg 360
gatacttaag tatagaatta caagtaatac tattgttaga tacctctttg gatcgataga 420
ttccactaca atggttggtg agaaaaaac gccaaagggc tgaagaatat ccttataaag 480
gcgttttaaaa gatgcttt 498

<210> 1120

<211> 455

<212> DNA

<213> Ctenocephalides felis

<400> 1120

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gcgtacata tctggaattt ttttggtgaa ttattttttaa tgtaataaat catagtaata 60
tttattttcca angtgcaa atggaaacta ccatccctat attatatata attgtatata 120
ttcctgaatt gttttatttg aatttatttt aaacacaaac ttttaattata ttcaaataat 180
gatggatgtg atttcatata tccctaaact ttggatcaga gtttgagaga agcctagcca 240
tagtgtatag aaaattatgt gtaggtgtat aattaagatt gcaggagtca aatatataaa 300
gcattgatac aaattatata ttccaatttt ctgtaaaccg tgttcttttg ttgattatgg 360
tttatatcac aatttatgaa tcatgtaaat taattgtaaa ttgaaatgt atctncgatg 420
tnaatgtatt gaaaaaaaaa aaaaaaaaaa aaaaaa 455
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<210> 1121

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1121

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cttgaagccc tngggagnac nnaagccott cggcgncnccg caggggcnna cctcccggca 60
ggggctcgtg gggtagttct tggcaaatta attattattc attaatatgg atttatatng 120
atatggaata aaaatcccag caatcacatt ctatcaaaaa taaacttaat tcaattcagt 180
ttggaaagtt ttaatcacia agtctaaatt atcataaata gccattatca actgcatgcc 240
gaacattatc cactaatctt aaacgacott ctttatgagc aattggacgt actttccata 300
ctgttggttat aggcacagca tcatcgctct ctatcatatc caagtctggg catcatcatt 360
tttcataaga gtgaatggca ctgattctaa gctgaatcct aaaccaaatt ttgaatatat 420
ttttaactca tcatgaaatg catttttttg atacattttt tctgggctgc tcccaattct 480
ttaattgagt agcataagcn 500
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<210> 1122

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1122

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ttggattatt gnaagacaat tgcaattata tttcaacaac tggnttagtt accgaatata 60
atttatagga ttcataaaaa ctaattgngt tcaattatca ttcacaatat tcataaataa 120
gcaaataaat tattcaataa aatatataaa attgatgttt ctgtaacata tatactataa 180
gataataata ggattgntag aaaactttta attaaagtga agtctatttc tttagttctt 240
taaggggctt gcatttagat caatttcaag actattctca ggactagaat tcaattggac 300
attattgatc tctgcacgat gttttccatc agagacagtc gttacgcttc tgtaaaatga 360
ggaccaagcg ggcatttgat tgggtggtagt gncgcattct gaacttccaa attgtggcng 420
ngnatcgcta ctcacgaagn atttcggtaa attcctgggg cattatctaa atcttctatt 480
ggtttagcat ggtacagttn 500
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<210> 1123

<211> 415

<212> DNA
 <213> Ctenocephalides felis

<400> 1123
 tttttcnttt cttcaanaaa natnttttaa anaatatggg ggttttgttt tatggggggc 60
 cttacatatt aacttttgat agcaatataa agtanticna nttatttcgn ggatcctacc 120
 caattccttt attaaactgg natacttctt atactatccc attattttta ttaaataac 180
 acacaacttt aaaaactncc ttntgggttt atacaaactt taaatatcac tcctttttta 240
 ccattaggat cgtaattaat ttntacctaa attatntgac ctggtaaagt tttacataca 300
 tttacctttt nggcatataa atttttttag tttaaataaa tgctccagaa atatttttta 360
 ttctntnta catatcaact taattcctag tttttcaaaa tnaatattac acagt 415

<210> 1124
 <211> 382
 <212> DNA
 <213> Ctenocephalides felis

<400> 1124
 tttttttttt ttttggnttt ttgganggct gggnaaaacc nttatttatg ggngcataga 60
 nagaagggtg tgccaaaatt aaaaaaccat tgganattta anttttttc tatattcaca 120
 ttttcattat attttctaac taatatcccc aaatttcaac taagaaatta aatcctttgc 180
 cagtctgaga agataggagt aaagttacat tttccagcc aactcccat tgacaagagt 240
 ggcatagcct ccttgcccat ttacatattg gccagggcac gaacacagct aattgngcga 300
 ttattttctg atcccactgg nggaaatgac acctctctag tagctttccg aaaaagtttc 360
 cactcttga ttggcttgac gg 382

<210> 1125
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1125
 ggcgggggct ctggaggacc caaaacnntt ttcctttttt aggggttcat ccttcttggg 60
 ggctggtttt ggncggggga tttttccgcc ttggccggcg ggnttttgcg aattgggaat 120
 cgttgggtga agnctggagt accgaaggga acagcccac cacctcgtct gggtgntggg 180
 aaatggatct tgatcctgga tctttcgtct aaagaattgg ggtctattat ggncttattc 240
 ggtancccat ctacctctac acccaaataa aacaaaatta tttatgggat ttcaaagaat 300
 acaacaagtc gccctggctc ccaaattccc ttaatatata tgcaagcagt gcagtctgtc 360
 tattattttt gccactcaca cttaaaaata taatggctgg cccgtatttt atattatatt 420
 gggtattcca gaaagcactg ttgtattgaa aaagatctgn aatcaacaca tctcatgtan 480
 ggtactttnt ttgaaaaggt 500

<210> 1126
 <211> 301
 <212> DNA

<213> Ctenocephalides felis

<400> 1129

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aantaaancn cctttggaaa ataantgaaa actctttggc agccccngca aggtccaatt 60
ncggtgggtg ctttaagggct tgggaatcaa aaattggncc caaaagantt tacttcttga 120
accccgaaat gggaaaaaga acaccaaaga acctttcacc tttggaaatg ggcaaaaagaa 180
agggattatt tgggncccggt gtggtanggt ggtccaaccc cttgacatgg ggaaactggg 240
tgaaacgtga aaatgggtcat gggatttggc ttgatccata tgcctaaaga accatttggg 300
cattttaaga tatcaaagtc cccacgcttt gttgttactt gggcaaaacc aaatcaaccc 360
aaagggaggg tatttcacgg nccgtgtctt cttgcnactt ggacgtgggt gttttcaccg 420
gctttggaga acttcatcaa ttgaaactta ctacatgagc atgantggga caacaccttg 480
gatnggggtg ggnaaacttt                                     500
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<210> 1130

<211> 121

<212> DNA

<213> Ctenocephalides felis

<400> 1130

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aacgcaatct aatgcctaag ttctcaagt ggcgaaaacc acgtacattc ttttttgtaa 60
gancacatgt atgttatatt ataaataaaa gagggaaatc taaccnnnnn aaaatnnnaa 120
a                                                                 121
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<210> 1131

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1131

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tacctcttaa ttttggggcc ccttttagctt taattggctc aaagctcctg ccatgtcaga 120
aaatcttctt ggttaaaaaa atatggaaac tggtaatttt atgtcgattt gnttgggggt 180
tggtatcata tattacacgt naaacagaca aactctgnga tattatgaag gggatTTTTT 240
ttataatatg cttagataaa tctttattac tccattata aaagtttggg tgttcaacaa 300
aactttcaaa ccagcttgcc gcttttaggt ttacnnttta aaaaaaatat acccctttta 360
ttaatcactg ggggtattta actttaatgg attattaatc tncatataca tttttagact 420
ttgcttcact ttagtagggg tttatcccct tccatcnctn tnttgcgggg gntgaacttt 480
tatcatttnt tccttcgggg                                     500
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<210> 1132

<211> 129

<212> DNA

<213> Ctenocephalides felis

<400> 1132

aatttggttt ttnggagcct ctttttanag cccatttcca gaacattttt tagtaacctg 60
 gtgggaaaac tgatcgacac cacttntgaa tttggtaaaa aacatttgga aatccctctt 120
 acttccggg 129

<210> 1133
 <211> 398
 <212> DNA
 <213> Ctenocephalides felis

<400> 1133
 taatcttaaa ccttaatat ggtttattac cgaaaatttc tcaaataata taaccattca 60
 acttattaac cgtcacttat taaacttttg ntcataaatt ggaatgtcta cagaacacca 120
 gogtggttta taatgaatac aaaaacgcgg aacagacaaa aataaatcta aattgcatta 180
 ttatgtttat aatgtatctt agaacatcaa agatataaaa cttttctaaa tattaaattg 240
 aaaaaatatg aatagccatg atataagggt aaatagatgt ccaaaaaaaaa cgtttcattt 300
 aagaaagtca tatgagtaga ttagatttta aatttgtgca cagaatttat gactcatgat 360
 ctttttaatc gctattcata aaataaacgg naaaatgt 398

<210> 1134
 <211> 327
 <212> DNA
 <213> Ctenocephalides felis

<400> 1134
 attgttctct tacaaatcta aaaattagaa ctaatctatg atataaataa aaaataggca 60
 gcatacttat acacaatgta tctaatacaa tatgtattac ttacagattg ttgtcatata 120
 aacttcaata cccagaattt tttttgcagt tgttcaaaat tacaaattgt ctgcacaatc 180
 catagatcgg agtggtttcg gaatggctct tttcccactt agattccttt acgtaaacac 240
 aacacaaagc gtgtggagca aaagttttcg ataatactgc attatattga atatatctgn 300
 taatgttcca aatcatgtag gttgcag 327

<210> 1135
 <211> 357
 <212> DNA
 <213> Ctenocephalides felis

<400> 1135
 cacacagtca gtgatagagt tacgcgttcg ttccgcactt aacottacga atacttagat 60
 tttctccaag aaaatctttt atctaagaag aaaccaaatt caagttgatg cattattctc 120
 cggaattggt agagaatctg aacaacggtt cgttgttctt cagctacgaa tacaaccggc 180
 actgtaaagg gtctttgaag aaactggctc gaaagctgct ccacgttagg acggcogttc 240
 tgaagattgg gaacaagtna agattaccag gaaaggggaa cgatgatgac cangaacaga 300
 attttaccga tnttaccac gnnttnngac atatgtnnac atattataca aatatat 357

<210> 1136
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1136
 tttttttttt ttttttttgn tttggaatac ataatttggt ttacatttat tcttttataa 60
 aattacataa aatatcttta ggaataacaa aaagggattt tcatatgcac atgtgcatat 120
 aaataccatg catatatgta tatgcatggt aacagaaaaa ttggnaatta gttaattagt 180
 tcaactgggac attatttttt cccacggtt gaaagaggca cttcatttcc taaaaccgga 240
 aagngatttt caaatgagtg ggcaacacat gatgctttaa atcggcacgc aaaagtcttg 300
 atgacatgtg gcacacatct caatcttgca tttgattttt cactttggat aaaaatatag 360
 tataattcct gntgcttgca gatatcgggc agtaagcaag ccactctggg aagatttcat 420
 caaaatcttg cccaagcttt atgccatgac ataaatgatg cctgataaaa tccttcctaa 480
 tattggtcct cagaagctgc 500

<210> 1137
 <211> 378
 <212> DNA
 <213> Ctenocephalides felis

<400> 1137
 ttgaaattta taaatatata ttttcataat ctatcatttt ataattctta aaattattga 60
 gctacattat caaataattt ctctgcaggt aacttccaat gttcaaacac ataaggtaaa 120
 cgatcttttt gttcagtgct ccaatgatgt attctgcatt taacatctac tttttcttta 180
 ttattaattg ttacaacaac attgaactct ttattttgca agttcatatc cggacctttg 240
 ataggctgtt cgggtatttt tattgcttct aatgggcact caattccacc tttaacgcaga 300
 gctatttgaa tgtgccatgg ctgcataacc caaggctctt ctttgttcat tactacggca 360
 aatacatggt tggagagt 378

<210> 1138
 <211> 264
 <212> DNA
 <213> Ctenocephalides felis

<400> 1138
 acgtggtaga aattctagaa gttgccaatt tcttctgtcg actagttcga atgggtgtgtt 60
 ggttacccat tegtgatcat actgggttcag aagataacaa cgcacagtca tgcctcccaa 120
 aaagatcaat ccaatggctc cgatggagaa aaatcttctt ttacatttgc agctgggttc 180
 agtatacaaa tattgacctt ctatatcttc tgattttttt aaaagtgggt gttcttggtt 240
 gccttctgat ggtggttggt ttgt 264

<210> 1139
 <211> 498
 <212> DNA

<213> Ctenocephalides felis

<400> 1139

gtttttgtta ttttcggaaa cttggattaa taatgaagaa ogaattaata ttcagaacta 60
ttactgcgtt actcaatata aacgatcgga ctcaagagca ggtgggtgtag ctgtctaata 120
tctattattc atgttcagat actcttcata atgcgactcc tatgcagttt cttgcgcca 180
cgatattact ggatatttct aatgaaatta cacaagtagg tgatattaca cacacagaat 240
caaacattga ttatagtcgt cctttacatt tctccaata aaaacatata aaatattatt 300
aaatttcttc atcagcagtt acttcatttt tcttatgagg gtgcaaaact tttaaacact 360
aatcacaacg agataccatt aattcttgct ggagatttca atgtcaattt tcgttcagaa 420
gaatctcaac cattaattga ttttttaaata aataaattta atttaacaat gaataattct 480
ccatttgaat caaccaca 498

<210> 1140

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1140

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caaaaattga attttatcag aaaacatata ccatttcata acaagtttta tcgcgttcga 120
caattttcat ataataaatt aataaatatt ttcaaaatga catcagaaat ttttctctta 180
tcacctgtcg atcgcaatta aaaaaacact gttagccata atattgcaac agaggaattt 240
atccagcaca tgcttattta taaagatcag cttatcaata acatgatata tgaaaatata 300
cttacctaaa tgataatcta ttgtttaaat gcatttttat atttcaaaat tcttatttaa 360
tattttcgct ttcgtatagc agataaaatc ttctggaaat ttgcaaaatg gaatcgatca 420
aaaaatcggt gntttacagg gaatgcacag caattaatgc cattattaat ggaaatgatc 480
ctatttaagc aggaacac 498

<210> 1141

<211> 289

<212> DNA

<213> Ctenocephalides felis

<400> 1141

catancaatt atgaaatgga ttcatgatat atatatatat ttatcttcaa aacatagaca 60
ttcaaaacta tttgtttctca ttaataagat tacattcagt caagaaaaac atgccaccga 120
gttttagctt tttcaacaaa atataatttt tttttattgt taaaaaaca ctgccatata 180
aatacaaatt caaacacatt cattacaaca ttatgagaat aagtttagga ttttaaccaga 240
aataaattaa taatggcgaa caaatagtaa taaataactt aaaatcagt 289

<210> 1142

<211> 484

<212> DNA

<213> Ctenocephalides felis

<400> 1142

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tttttttttt tttttttttt cggttttacaa aattttattta ttctgtcagaa aagaaattta 60
taaattttact ttttttgataa aatctgngtt tgtaaaaaag ngttagtgtg tattcaatca 120
tacaggnaat taattctgtt ttttttcagt aaccttttct taaaactttc taaaactttt 180
caatttttaa cattttcaat attttgntac tcattttatt ttatcatttc attttgatta 240
ttggcatatt totatatatt attttttcaa caatgttatt aatttaaaaa atccatcatc 300
ttataatttt cctaaacata ttgntngctt aaatcttata aaaatcatgt ttcttgacag 360
atgtcctgaa gttggaacat acctagttcc gaaacgcgat aataaataaa taaagaaatg 420
ggtnttgatt attttattac tttttggatt ctttggcgaa gctcaacaat atatatatat 480
atct 484

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<210> 1143

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1143

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aaaatattcg aaacatttac agttacttaa gaataaattt acttatgagt aaacatagtt 60
caaaatattt aatgttattt ataattataa aataattgat ttttagccaa tcgtcgaaat 120
aaaaaaagac aaataaataa aaatatnctt tataaaatac gttttgacac ggattgtgtg 180
tcatctatca gcaatttttg ttaaatagta tctaaaataa taattacaaa gtttaaaaaa 240
taaataataa attttatatt taaaataagg natacatacc acactagaaa aaaacatttt 300
ttaacttccc gtaaggngat tatgtinatga accgaaaatc gaaaatgaaa ttttttgcac 360
ttctcgacgt cttgaagggt tctggacatt ttggcatacc tcagaaaaaa tggatgtgtg 420
tgtgtgtgtg tgttttgtat gccgcatttt tagtcaacgt tttcgggcgc acagatcaac 480
cgatttgaat ggggttaaa 498

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<210> 1144

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1144

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gcatctcgaa taaaccaaac gattggaccc aaagccaatg tcattattcc ttgcaagaac 180
atgaacagcc cgtatgccga aggaaatctc tcctgtgaaa aatattcggc aaataactaaa 240
ggtaaaggca catgaatcca tgtgcggaag aatcccaaaa aacttgatat tataagcatc 300
attgtaaagt cagtcacgta caagaacact atacgtgcga aaactgagaa taaagctccc 360
gctaaaaata ctgttctact gctgacttta acacaagcag tcattcctgc caaaaacatc 420
cttgatgaca aatctgcagc tgctgcagca gacacacaaa ttgctgtatc agttttgcc 480
gcctaatagca aacagataca 500

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<210> 1145

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acattgatca ggaactggct ctccttttagg acgtaaacac gtgaagaact tccggcatgt 180
tgcgctgttc ttgaaagcaa attttccacg tgctcggcat tgcccgcacac aggtttcgt 240
ccttggggaa aactcggcgg gttcttcgca ttgcaatacg gttcctcttc cgccatata 300
tacgacgtac aatgatttat caccaatgta cggaagcacc ttaggctgtg caggacatgt 360
aactgtatag cattttgtgc ccagagccat aggtccgcaa ttatgacgta acggatcata 420
tgcaaaattt gcggggcaat aatattgggt tcctatacta ttttcgtcac aataataata 480
gctttgacaa tcatttat 498

<210> 1149

<211> 306

<212> DNA

<213> Ctenocephalides felis

<400> 1149

taaaattgtt gagcataaaa tacttccaaa gtctactctc caatgtaatc tacaggatca 60
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cttttttttg atattcgtgt tgatactata taaattttta aaatcttatt ttattaattc 180
actcatactt ttagcacaga tttaatactg caaaaatttc aatacaaatt tattatatac 240
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ctctgt 306

<210> 1150

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1150

ctcaattaaa acaaattttg tgctcataac taaagatttt tctggagttg cggncatta 60
gctcatagaa ataaattatt gacagcaatt ttgttcaatt atatgtcaaa aaaattatgt 120
ttctatctaa tcattattga atgttaatgt aaatggntta attttttaat gcatgaatat 180
ttccaataaa acatattttt gaatgtgaag atagnntatg gcatataaat tggaccatta 240
ttinctatggn caatatttga aaatattaaa ataattttta tgcttattat nctgnaaact 300
attaagaacn ttinctggcc cngaatatnc ttttnaaaaa catttggtta ttcnaaatta 360
ttaagaatna aaacgtgttg ntttcagacn tgaaagggtac natttctaac ntctggnttg 420
gcacngaacn ataatttgnt taaggccac atttaaaatc ntnacaaaac ntctcacn 480
nantttttta ttattcatca 500

<210> 1151

<211> 349

<212> DNA

<213> Ctenocephalides felis

<400> 1151

attattgact gttttatatt tcgtttgatt ttgtgctgaa atgatgcaaa aagaataatt 180
 ttgagcaaaa cctacctctt ttttaatttg aaactataga gggnattatt aatgnttcca 240
 attccataga atgtatattt gtagattagt aaaggtaatt aatgccnaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaa 314

<210> 1155
 <211> 352
 <212> DNA
 <213> Ctenocephalides felis

<400> 1155
 atggctacat taaaaatcaa acgattcaat gttttttatg aattgagaaa acaattttata 60
 taaaaacgat taactttcat tcagaagttt ttgttaatat aacaatagta tctgaaaaat 120
 attaaaaaca tctgtcaaaa atatgcaaag taatttcatt caattataaa aagatttttc 180
 aataatttac aaaaattaaa aacatttttg aaaagatata aatatcagca catgttaaatt 240
 agtaagagac aagaaacatg acctttaaaa tttaatccgt gttgcatata caacaatgta 300
 ttttaaactg tgattttggc aaccatcact tcattttattg catacgtaat gt 352

<210> 1156
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1156
 ctantnagcc cttactnac ncttgannn ccgcggnctg ccggcggtcc tggncaaatt 60
 ggagttattc gatgtcttat gtagagnatt ttgaagnggg taaataaata atacatcggc 120
 tcgcgagnnt gttaaagttt gattaaataa cttagtgtac attttcaagt tattgaatta 180
 caacactttg aaagcattaa gtgcctttgt tagattttta caatatcaac ataataaata 240
 attatattaa aaaatttatt ttaattcact catttttaac aaaataaatt tcatatacaa 300
 tattttaata atcctgacaa aattgtattt aatttacttg atatttttaa taataaatgt 360
 tttagttaga atattaagga aacgtataca ttaaaataaa atgatatgtt cttcaccttt 420
 atcttttcaa taatacgaaa ttcgaattag tatggcttcc gcttaaatta aatatgtttg 480
 ctaaactgcc aatcaagaaa 500

<210> 1157
 <211> 92
 <212> DNA
 <213> Ctenocephalides felis

<400> 1157
 caaacgaatt acaacaagt gaaaccactg taataacaaa cgaaaagtgc tacgaattgn 60
 ctcaattcgn tgaaccaact tcgcaaatat gt 92

<210> 1158

<211> 495
 <212> DNA
 <213> Ctenocephalides felis

<400> 1158
 tttttttttt tttttntttt ttcaagggaa aagactttat naaaatangg ngattttata 60
 ntngtatnc aacnctgatt acnantgttc cattactttt ataaaatntn agaaacaatt 120
 nacgctngna tnaacaattt aacttcaact ttgggagcag tttcaanagc agccaacaaa 180
 tngtctacat tacagcaata tnggtatcct ctagttaaat tagcaaaaata ggaatcttca 240
 aatccagctt ntttgcagan gtccttgcag agtanatctt tatgaggaac tttntntgca 300
 taaggattat tgagggtaan aaaagcaang ccttctccag tttttggcga tngtactatt 360
 ttccaattcc atttgggtat ccaaagtgtt ccgtntttgg caataaacat ttttacttcg 420
 ttgttattgc atcaggcaga gttaggatat natggacacc tgaatagacg gncaaattctt 480
 cagctntgga agaan 495

<210> 1159
 <211> 148
 <212> DNA
 <213> Ctenocephalides felis

<400> 1159
 atgaaattat gtgttttgaa atttttccga ttttgtaaat aagacatgct tttgttttga 60
 tatttttaaat gtgttcattg ggattactgg ctttttttac aaactcatat gcttgatagc 120
 catatacata cacataattt gcacatgt 148

<210> 1160
 <211> 339
 <212> DNA
 <213> Ctenocephalides felis

<400> 1160
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 gaaattaagt aatattataa aaatagatat caatctttca tcttactaat ttgatattga 120
 taacaaacga agcaatacat aggggtgtgtg gttgaggcgt ttcttttttt gttttatagt 180
 agatgaattc taaaacatcc agaaaaataa tatatataaa tcagttaaaa aaatgttttt 240
 tttcgccat tcatgtatcac aatatcccaa caatgcaata tatggttggc acccattcaa 300
 aactaaagta tgacaagacg catagccaat tgaaaatgt 339

<210> 1161
 <211> 212
 <212> DNA
 <213> Ctenocephalides felis

<400> 1161
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ggccatgggc cgttttotcc agctctttgg cagtctactg cgagattctt gcaaattctcg 120
 gaatccaagc ttgaagtgcg cgtaccagtt acgacatcga atgcattttt accaacgcat 180
 tcttttaata ttccatcagc tcctttttca gt 212

<210> 1162

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1162

ttaaaacaaa gaaaattagt tcaaataatt ttcaattctt agtttgtgtg tgcataatatt 60
 gattattttag aaatctttat aaacaatagg acacttacat ttcaaaaata ggtggtaccg 120
 aataaattat gatctctttc actacatata ttacaatcaa catttattaa ataagtngtg 180
 aatttatatta ttgngcaaat aataatatgc tntncatgtt tagnaataat ttattaattt 240
 aattgnataa tttgntgggt taccncacat tttagctact ggtgagctag gcataatgng 300
 aaanggatat cttaattttt ttgngatcaa agctttcatt ttattaaaaa aggaanttat 360
 taataaatat gngccanttt tcantattgg gatgctantt atgccnatga tatggtggna 420
 tcatnatatt tgaataatcg attttttgat cctnttgngc gatatttacc aacnntaatg 480
 ttttaagctn taaagaat 498

<210> 1163

<211> 360

<212> DNA

<213> Ctenocephalides felis

<400> 1163

tccnaagccc ttgtnngctn catttngntt aacgggggcn ncggcggggg actaaaattg 60
 ntgagcataa aatacttcca aaggctactc tncnatggaa tctacaggat caacattcat 120
 ttataaagat ttaatgggtc gagggnttng tatnatanaa cncctatnaa aacttttttt 180
 tgntantcgg ggtgntacta tataaanttt taaaaactta ttttattaat tcaactacat 240
 ttttagcacc anaatttaat actgcgaaaa tttcaatata natttatatt atacagatac 300
 ancaatccag cttgngngta ctotcactct naataactac atgantatta ancncctctg 360

<210> 1164

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1164

cgagtatgaa tatgattcaa agggaatcaa aaataacaaa gataaagttt cattaaaaga 60
 agctatttta ctcattggaga aaatgcaaaa taaaatggat gattccagca ctgtgctcag 120
 cgatctggac gatgatcttt tggaagctga aattttgcag tctgcaaatg caggaagtca 180
 tgaaagcatt ttcaaaggtc gctatcacta cgtgtggcct atgttgcttc tccttttaat 240
 tgttcttacc gttttgtttg tcgttggaat aatagttcac atttgcaccg ataaccgaca 300
 acgttcactc aaatatcaga atataataac tgctgtgaat cacaagattg taaagaagaa 360

ggattgtgga ttagtatatc aacctctatc agaagaaatc agatgtcccc aacgccaata 420
 gtgacacgct atcaagctat ttgagcagcc gtttcatcat gaaaaaatac ccccgacaag 480
 tgtacttttaa acgttaattc 500

<210> 1165

<211> 495

<212> DNA

<213> Ctenocephalides felis

<400> 1165

tttttttttn ctnttttttn gatgaattaa cattagtcaa tttttttatt nnaaaaaata 60
 taatatgaga tttccgatta caaattatnt ttgttttttc tttgatgttg atggtttatt 120
 ggcttttaaat ttagatatta ttgnagtat caaaacaaga ctgaatccta tagttgtaaa 180
 tgcgataaca ccaaataatta cnatagatca acgatggngt attcatttat gagtgnggta 240
 aatttatcaa cagcatcacg aatcatttcc actaccagag aaactagatc atcaaattgt 300
 gcttttggtg gtggcacagg ttcagcttta gtatttttgt caagcccnnt tttttttttt 360
 tttttttttt ttgcttgngg gggtattaga ntatggattt gtcactata aaacnaatag 420
 ttaanaaaaa ttttttaagg tcaatttcca cgangcaatt ttncacaaca tcattaattt 480
 ttccaatctg gattc 495

<210> 1166

<211> 419

<212> DNA

<213> Ctenocephalides felis

<400> 1166

cagcaccatt agcacaaaaca gacaaccggc atgagttatc caatcgcttg cgattctatg 60
 ctctgggtaaa aaatataagt cgagaagttg ccatatgctt ctccaaacat tgacagttcc 120
 aatgaaacta aaaaatagaa ataagtcagc aactaaaact ctccaaaatc cttccaaaacg 180
 agcacatgtn catcgcatga taggctgaag actgaatgtg agtattacaa tcccgtagcc 240
 aagtgcaggt gaagccagag cactaagcga tggatcatct ggaaatataa tattgtccaa 300
 tatcacccaa gctccctcnc acacgacaac caccaaggat ccaacgatga atacggaaaa 360
 taagcaatcg attaccgtaa agccatttct tntgatgctc gattctttaa aatatgtag 419

<210> 1167

<211> 293

<212> DNA

<213> Ctenocephalides felis

<400> 1167

tagcccttca atcattatnt ttatttaata attgggcaga tttgntagaa caaaaataat 60
 gattgttagg gctataaaat ctgcacaatt attaaataaa aaaatattgg gaaaattttc 120
 tatatcatgg gcaatttatt acagaagagc gaagttaagc atgagggntt tatcaattat 180
 tggctataaa attataatag aaatgaaaaa aattgttaga tataaagaaa tgtttactgt 240
 aagatttttag caagtgttga gttgaaaatg aagaatatgc ttacaaaatt ggt 293

<210> 1168
 <211> 109
 <212> DNA
 <213> Ctenocephalides felis

<400> 1168
 caatcaagac ctttgaaaag atttttgggg cannttaggt tggcccaaatt ccaagaggaa 60
 attcaacggt ggccaagcgc ctttncctac atcagcgggc aaatctggt 109

<210> 1169
 <211> 438
 <212> DNA
 <213> Ctenocephalides felis

<400> 1169
 tgagaataaa gctcccgcta aaaataactgt tctactgctg actttaacac aagcagtcatt 60
 tcctgcaaaa aacatccttg atgacaaatc tgcagcagct gcggcagata cacaaattgc 120
 tgtatcagtc tttgaccagc ctaatgcaaa cagatacatt gtttgaatag cagaaaaatg 180
 ctatgtcgga gtatagtgc aatgtcactc caataaccat atttacataa atccagtctt 240
 ttaacaaaagt caaatccaaa aagtcaacga taacttgcaa ttttccctg gatctcttct 300
 ctaccggtgc agtagtgcta tcaactgaca tgactgctcc agtccaatta cctaaactag 360
 aaatggaaga tccacgtctt ctcatctat gttcttcata ttgaagcatc ttaactggag 420
 ttacgccttc tatatncc 438

<210> 1170
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1170
 ttttttataa atngttttaa aattacatat tattgaacaa aaaataaact gtagtaaatt 60
 aaaaacaaga tccaaatttc caaagcaatt tgtaaatcaa taactgagaa acgactcgtc 120
 gattattgac aaaattttaa cagcacgatt ttcaaataga aaactttttt aatgggtttt 180
 gaattttcaa aatcgattca caaatgtaag ctataacgtg aacaaaaaat ttgagatttt 240
 tttgaaaatt ctaaagaaac ggctcggccg atcatgaggc aaaactaacc agcacgagtg 300
 cttatcgaat ttgcgaattt caacgacttt tcagatagga ttttgcatta ttaagaaaac 360
 gtcgactaaa gatgaaattt agactcacgt aaaaaagtgc tgctcatttt tttggaaatt 420
 tttatatttt tctgttgatt agaaacagct tggccgtcgc gcacaaaact aaaagacgct 480
 agtaattatc tagtacatca 500

<210> 1171
 <211> 220
 <212> DNA

<213> Ctenocephalides felis

<400> 1171

tctcaaggtc tggtagagcg ttccacaaaa attctagaaa tcagaacaat gcttccaaaa 60
tacaaatata cgtcctacaa tatcaccatt caacacctcc aacaatttta ctatatcatt 120
tactcctcaa aattcgctct agtaggctta taaacaccga catccttgct ctccgaatgg 180
tagcccaagg aggccaattc gtccataacc tcaacattgt 220

<210> 1172

<211> 284

<212> DNA

<213> Ctenocephalides felis

<400> 1172

aataatttta actatgtctt attatatccc tttgtgcata taggggntaa actgactaac 60
aagtatcact tttttttata aatatccaag tatcatacga cacacgttta taacgatttc 120
ataaattaaa tatcactggt tgtttttgta caaaggcact ttttgtcttc aagcacacac 180
cgaggcttta aactaccaat gtaatatgtg actagaataa ttttaattgt ttcagcgtcc 240
actgaaggct ttaagcaact tcgtgccaaa cagactctct gtcg 284

<210> 1173

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1173

ctaagatgta tatattctac acatatgtgc atataatatt gtcaagtaat gtcattgtgat 60
atatctccaa aaggogtaaa cgctggaaga aaactgagta aactagaaaa ccattgatgt 120
gtggaagatc tagtccaaga agctttttta tggataaaaa tggaaacaaa aatgtaaaaa 180
tatagttgca attataataa tcatatcatt agatatgtag cgaatatgag atagattctt 240
tttaaaaactt ttataaattt atttatatat aaaaattctc aatataaata gtatactcaa 300
atatatttat atgatttaaat aatattgaag tttttataac caatattttt cagtataaatt 360
ttcagtaaat gatgattttt ttataaaaag tgcgtattaa ttaaaataat ataaaaaaaa 420
aagattttta ataatcaata tactattaaa tatatgatca tttttatgaa gtattaattt 480
tcttataaat tattagataa 500

<210> 1174

<211> 353

<212> DNA

<213> Ctenocephalides felis

<400> 1174

cttcattttt tcaatatgca nttcgatttt aatotaaggg aaaaaatntn cnggtgtngg 60
ttaanattta atnggaata aaattctgtg tattatatatt agtttttttt aaattatcat 120
ttaatnttaa ttattgntaa aaatatnatn cgattaatta aaataatatt aaacataaat 180

ttcattgntt tttttangaa actaaattgg gaaccttttt atatcttatt atcnacgcta 240
 aaaaaaatac atttttttta gtattttacc gtttcatatt atattaanaa aaacttttag 300
 ttaatactaa ttattataaa aataactaaa agttnnacaa aaatactgga agt 353

<210> 1175

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1175

tttgtnanna aagatacagg ctgtttgttt atattgcata ggtatacaag tgaagcaata 60
 ttttgaacat tgaaaaaatc acaaattggg tatataattt acagnaaaaa tacaatatag 120
 ttcagaattc ataaattaat atttntaca agaaacaatt actttaggng cttaataata 180
 agtttcttaa tgaggcatga agatataaaa ttaaataaaa atgatcatag ngnaaaatac 240
 aaattaaata gttcacacaa ataaatagtt agcaaagtca tctacgctat atataccott 300
 aatactcgta tattcttcta gtagtaattt tttcactaat ttcacagnct tcaagattat 360
 tccaaaagat ttacgacgaa ccatctgatg tgagcgaatt tgatgtagag ctcaagtcgat 420
 ctccgtattt attaagaagg ctaatatgac accattcgtn cagccaaaac caagctggcc 480
 tcatattntc cgcatctctg 500

<210> 1176

<211> 299

<212> DNA

<213> Ctenocephalides felis

<400> 1176

ttggcaatga aatacagttg ggaaaggact aaatcggctt cgggtgctaag gcttaagctc 60
 tanaaattct ttcccatttt gggatttttc ccggggacaa aggcagaaaa acttggttaa 120
 ttcaccgggg aatttttaaat ggtagaagca aaacatccaa ctottggaac ccggagatac 180
 caccacctcc agaaaatacg tctgcaggta acgtcattgt tccacaaacg gaaactgatt 240
 taaatattca aaaatcataa aagcggatcat agntttatta atgagttgga aataattgt 299

<210> 1177

<211> 230

<212> DNA

<213> Ctenocephalides felis

<400> 1177

aggtagcgt ttggtgaatc ctgaagcatn ctgttcatag caacagctga ttgggatatc 60
 agcctgcgct gtccggactg gaccatggtg ctcttgacga gcaatcctac acatctcatn 120
 gccataacga aatacgaaaa ttattagtga accttcgaaa aatcaggaac cccgttgtaa 180
 atgatagatg gacacacaca acgcgcgttt gaaatgaccg acactgtngt 230

<210> 1178

<211> 318
 <212> DNA
 <213> Ctenocephalides felis

<400> 1178
 ggcaacanc t tgccttggg caccggctgc tgctttggca gcataactcc tgctgttcga 60
 taaaatcgat gcgattttac cggattctgt tttgctcagg gttcgcaaag tggaattgat 120
 tacggagtgc atcttgtaat aaaatgtata gccagttgag ttgaattaaa ttgatctcac 180
 ctgtaagcta ctgaacgaag aatattaaat cctttatgag cactgatagt attttttgga 240
 gtgtgcttac gtaacttctg cacttttcag tttcattgct tgnaacattt tcttgaggag 300
 cggtgaattc ggcattgt 318

<210> 1179
 <211> 329
 <212> DNA
 <213> Ctenocephalides felis

<400> 1179
 tgtagccacc gcgatacgaa tcggaacgcc catgcttata atccatgttt ctggatagct 60
 gactcacaaa ctaacttcaa tggaacocca actcacacgt caaggatttt gattaaatac 120
 acgtgcaaat ttgaataatc aaaattaaac ttgtcttata ataaatgttc cacacatttg 180
 ncctnctgca tntgnaggta tgatgatatt gaactggcac gactgcactt aaaatagttg 240
 cattataata ttaattcgtt gcacttgaaa atttaattgct gaaatgncca aatagtccac 300
 acagcctaca agcacgtaac acacgtnaa 329

<210> 1180
 <211> 190
 <212> DNA
 <213> Ctenocephalides felis

<400> 1180
 ttatattana gggncgtggt gaggttaactg ncggaaaaga aaatttantic tttgagagtg 60
 gtccatttac ttatttttgt cttcaagcga ttacacaaaa cattggagt gctgattctg 120
 ngaaaggatc tatgcaatcg ttaaataatag atggtatatt aaaaaacagt tttataccag 180
 actatacagt 190

<210> 1181
 <211> 305
 <212> DNA
 <213> Ctenocephalides felis

<400> 1181
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 tatagggttt aaactgacta acaagtatca ctttttttta taaatatcca agtatcatac 120
 gacacacgtt tataacgatt tcataaatta aatatcactg nttgtttttg taaaaaggca 180

TTT "GCTG"

ctttttgtct tcaagcacac acgaggcttt aaactaccaa tgtaatat t gactagaata 240
 attttaattg tttcagcgtc cactgaaggc ttttaagcaac ttcgtgccaa acagactctt 300
 tgtcg 305

<210> 1182
 <211> 58
 <212> DNA
 <213> Ctenocephalides felis

<400> 1182
 tacgatttag ccgaggcaaa taaaaattct attgnaaacc canagtggaa gcaaattg 58

<210> 1183
 <211> 383
 <212> DNA
 <213> Ctenocephalides felis

<400> 1183
 agngggctaa tataggatct ttataattac cgnagggcca aattagnnga caaaatnnaa 60
 ctgagatttg taataaagat tgcaaacatt ttcaaaaaaa aaaaaaaat tgaaaatttt 120
 acgatttttt tcggaggagg gtaattttca atatacgggt tcacagaggg gaaaggggat 180
 ttcaaaaatt ttcaaaaaaa tcgattacgt gattaagtga cgtcccgagc acaaaactta 240
 tgggtccaaa tatattttaa atnttaaaag tccaaatgtc caaaatctgt attacaaatc 300
 tgtcagtcct tttgcaatcc tttatcaaatt attattttcc atcaaagcac acactttttt 360
 atacatgcat tttccaaata cgt 383

<210> 1184
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1184
 tttttttttt tttttttttt tcacataata tacatttatt ttcaatttaa ttaacnggga 60
 aatgctattn cataaatata acgtattnta acatacaaaa atcaaaacat atttatncta 120
 ctaagtttat nctgttngca acagttgtct taccttaaag taaaaactgg gggccctgcc 180
 ctatatacac tgngtctatt tactgattac aatcacatct gacaatccca atcacaattn 240
 antntaatcn ccantcatt tatttaattt ataatacaata tgcttggtt tgaattttaa 300
 ttcaatngga aaaccaatca gatnggtngc acacataaat atactatttt gtattttatc 360
 gacatgaaga gataagttat attttttagat caccactgac ttttttactt ttgattaagt 420
 ctcaaattta tattatatat ttaaatattg gtttataata ctgaatattt gatgtgngaa 480
 tattattaag ccaaaagatt 500

<210> 1185
 <211> 327

<212> DNA

<213> Ctenocephalides felis

<400> 1185

cttctactct atcgctctg aagaaagacc aatctttaat aggctcgatg aagatTTTT 60
tcttggcatc aagaggtgaa ttatcttgtc ggaattcttg agaccatggg cggtgagctc 120
cgaagtagaa ctctcttttt ttgatttctt tcctcgaata attcggtttg ttaggagttt 180
tccaatatac ttgttccatg ctctgcttaa tgtagttttc tggcaaattg gaatattgtt 240
ttgttaaadc gccaaccttt tggcataatt gcaaagatct cctcatgttt gaaattattt 300
acacaaaatc aatgacagaa taatagt 327

<210> 1186

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1186

atataagtaa acacaaaaat aatccattgg ggttccaata gatttatattc ataattaata 60
ttacttacac gtagttatat ttttatttgt aggaagtagt gatcattaaa gttcaatttg 120
aaaaaatatc aatttttttt tatcaaatgc tngttagtga attatatata caatttcatt 180
tataaatttg ccaaatacta atttataggt gatttatattt tctattctgc ccatcacaaa 240
taaatagaatt cttttttata ttccctccat ttgcttttag attcagtagt aatcaactact 300
tctatcaata atcaatgcat atccctaatt aagagagnag attcaaatat ctttttatta 360
attctaaaga ggattcttat gttgatcgat attttaacat gntgaaagga aaactgaacg 420
acttgctcct ttatattctc attttaatag cagantgntt tttgaattag gtataatatc 480
tatatttatg cnaaataa 498

<210> 1187

<211> 496

<212> DNA

<213> Ctenocephalides felis

<400> 1187

aagcngaaaa aatatgaaaa atatgtaaac tгнаатааа ataaatatta taattatttg 60
gcaattaata ttaattataa aactattatt atatttctag aagcaaaatt ttttttcct 120
taaagatggt tttttgtagc atgtgtattt cattcaattt acaattatta tgaaggagaa 180
aaactgtcga atatggagtc acgttttact ttaaaatttc aataaagtat ttaataaat 240
aacatgttta atgaatttaa tttttttcca tttattatac acagagagaa tgctttatat 300
tcaaagattt atgttttaaa atcatttttc ataaagggtt tcatatacga cttttatatt 360
ctaaatcatt aatttttggg atttttataa taattaataa aacaaattta ttcagtaccc 420
nacntcagta tttaaaaatt attaacaagg atatgcttat attaatacaa tngnagtggg 480
naattatttg cncaaa 496

<210> 1188

<211> 448

<212> DNA

<213> Ctenocephalides felis

<400> 1188

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ccgggcgggg gaccagaagt ttacttacat aacttgngng ggnaacttat tccaaaaaga 60
tgngnttacg ggngnatata gnagaataag atttaatatg tnatattaca tggnaacttaa 120
ttttaattg natatcaatc tttagtataa gcaagactac gagggccgta ttttaatgna 180
tattaaaaat gatgngnata atcattatth ctatttaatt caaaagagta tatatttgna 240
atatctatat ttaaacaat attattaaaa taatcatata taaattatac agcattctat 300
tttattcaat ggcattgagca ttcaggacgt aaagngatta acagggttcg atcaaatag 360
aattctatag ttttggtcta aaagaaacga aattttaaaa aaattatggt attcngnggg 420
tttattacag ctattaaatt ttttacct 448
```

<210> 1189

<211> 117

<212> DNA

<213> Ctenocephalides felis

<400> 1189

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cgnacgcctt cttaancncc ttaaaangcc ctcgagcggg ccgnccgggc acggactttn 60
aaantacaaa ttnacggnat tggtataaac taacagaatt gacagtttta taattgt 117
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<210> 1190

<211> 213

<212> DNA

<213> Ctenocephalides felis

<400> 1190

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caacaacaat ttcnaaacia aatggctgga nggataaaac ggntaaaaaa nggtattcaa 60
tnggattggn ttttggtacc ggtaatnccc taaagggagg caggggagggt actttttctt 120
tntgggcggg ggggtgactt nggccaatg gtcaatttcg gttatttncc aaacttcaag 180
gcttttgaaa ctttggcatt caaaggacaa agt 213
```

<210> 1191

<211> 207

<212> DNA

<213> Ctenocephalides felis

<400> 1191

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cgctatcaca gcaaaagaac cagccatgat tgccgaagtg tcggtgactc tcatgtgatt 60
catataatca gctttgtggt gcttgtgatg atggtgcttg ttgaattggt cttcatgttc 120
attagattca cgatcctggt gaattgggtg aaccaactcg gctccaaaat caggcgacga 180
agaagagctt tcctgaatcc tctccgt 207
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<210> 1192
 <211> 330
 <212> DNA
 <213> Ctenocephalides felis

<400> 1192
 agggantagt aaagggaaat tagngcccat tgataccaaa acaaaagaat tnggtctggc 60
 ttaatttca acaaaaaaat gggtggggtt antggaggga atgaaaaaaa ttacttgga 120
 ttaaattggc gtctanttcc ctacccatt tcaacaagg gatcaacgaa aggggtgggc 180
 aatngttttc aagccgcatn ccaagttnat tttagtagga atcaagcccc tcaagcggt 240
 nccctacctt cttaattttg cttgcaaggg tattgaaacc gggttttaag cttggcccat 300
 tgnaccgggt ctttggctaa ccaaaaaagt 330

<210> 1193
 <211> 149
 <212> DNA
 <213> Ctenocephalides felis

<400> 1193
 ataaaacaaa cccccgatt ataaaatatn aaaatatgta ccatatcatt aggttaagna 60
 tgtaaattgc gctcgaaaat tatttattaa taaaacattc ttaaaataat tgattgcaat 120
 tatgaattca ttaacgatat ttgttatgt 149

<210> 1194
 <211> 342
 <212> DNA
 <213> Ctenocephalides felis

<400> 1194
 aaaatggcat tatatgcnaa ttataggctg agcctttata aatctgtgna tgaaccanac 60
 cactctatct tctaacctaa agtgtaattt tgttttacag aattttctta ataggtaata 120
 tttttaattg cagngtatca tattatagtt tgtaggtgtt atattttatt tgtaaattgn 180
 tgttcatatt tctcaaacga ttgtttatgt attacacagt attaaaataa accttggatg 240
 caataattgt tataacaaca ttgttgtag taataaaatt ttatcaatgg attattaaaa 300
 aaaaaaaaaa aaaaanannaa anaaaaaaaaa aaaaaaaaaa aa 342

<210> 1195
 <211> 131
 <212> DNA
 <213> Ctenocephalides felis

<400> 1195
 atgatggcat tcatgacgac ttctgtcgtg naacaggcat tttttgttca caaatcctgn 60
 ncagtaaattc ataaatataa cgaaactatt tgtagaaacc tttctcagta taaagacatc 120
 aacaccaaag t 131

TTT "SEE" TTT

<211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1199
 attattcata agacatcaaa gactttatta cataagggac aacatagtaa ttaaagttac 60
 agaaacaatg cagagtcaat acttcgattg cttataggaa ttcattggagg tcgaagaaat 120
 ttctagtata tttttgattt caaattttta tactcagtta atgggtatgaa tgctaagtct 180
 ctctctactt tattcatata tgacaatatt gcacatttgt gcacgaaacc ttgagttgaa 240
 tttttcagag atagttatgc atgaaatggt gaataccagt atttgctcca acggccttcc 300
 tgcattgcgtc tatatggaag ctatgaactc attttaaagt tgaagatttt atggaattaa 360
 ttataagagc ataatgactc tgagtttgag gaacttgctt atgttttaact aaatcatttg 420
 caacaacatt taaagtcgga actgttcaca actggaaaca ggatatctgc atttataata 480
 ctttaataat aattgcat 498

<210> 1200
 <211> 226
 <212> DNA
 <213> Ctenocephalides felis

<400> 1200
 ttaaatattt atatgatatt tctctacgat gtttaataaa aaaaaaattg attgttttga 60
 acttgaaatg tagatttgga atatctgcac gactgttatt aatttaaaaa gttcaaagat 120
 tgttttattca ataaggaaca tattaatat catattgtta aatttttata tattgatcta 180
 ttgtaaatcta tctctgtgat taacatttac caattaaaat tggagt 226

<210> 1201
 <211> 228
 <212> DNA
 <213> Ctenocephalides felis

<400> 1201
 agtatataga tagatagaaa ataaatatag atatttaaact gtgtttaatt aaatattnac 60
 aacatataat ttataaatat atgcttagaa aaatacttgt agcagcatta aaattaacat 120
 atcaagcatt tgttttcata aaaattaaaa actgcttcat ttatatgatg aaactatgat 180
 cgtaaggcct gcaggcgact ctgcatttct tctaaatctt cttctggt 228

<210> 1202
 <211> 70
 <212> DNA
 <213> Ctenocephalides felis

<400> 1202
 acttagcggg cgccgtgcaa gtgattcgac caaagacgga caccgaagta gacgtggaac 60
 tataactggt 70

0091636 1301
 1013111 9915660

<210> 1203

<211> 114

<212> DNA

<213> Ctenocephalides felis

<400> 1203

ggcgcaaccc ttttggcgac tgcctcacct gccttcttag tgagtttctt aagattattt 60
ctctttttga tgtaagaat agtcttaact ctcctcttgt tttcaagagt acgt 114

<210> 1204

<211> 337

<212> DNA

<213> Ctenocephalides felis

<400> 1204

gaatactggt tcataaaatt tagaagccct nntttttcgc ctacggcggt atggngttcc 60
gattngtggt cgggcttggt caaaaatgta aaatccacac gcgcattctt caaaggcggt 120
aattcatgta aaacattcgg taaccttaac anttggtgta cttaaattct ctgcacgggt 180
tgaaaacaat ccttaagcat tttaaatcat cccttacant tttaccctgg ntgattaatt 240
tagtaaatc cgtcacggga tttgtcgagt gtttaacttt atcggcgatg ctggttctgc 300
acgcgttcaa ttttcggcgt gttttgtcaa atcttgg 337

<210> 1205

<211> 445

<212> DNA

<213> Ctenocephalides felis

<400> 1205

aaatatggcc caaacaaaat attgcttttt ctctaattgn gcttttttaat gaagaatcat 60
acataagtat gaataatttc ctaactaata ttgctttatc attgatttct ttgaaatcag 120
tgtctttaaa gnttcctatt tcacttccat ttggcatagg aagttcactg caacgagaaa 180
tcaaacttat acctacacaa gctgcttcaa taatcattgg tttagaggac ataacatggt 240
gtaacaatgc atttactgca attgtataag tattgctttc aatcagntta ctagaatccc 300
tttttgaaat ttgtattcta cgttcacatg cattgctaaa tgctaataatc agcccatggt 360
tgttttcatc agatatgta gctgattttg attgcgttat catagactga atttcttttt 420
caaattcaaa tgctttcata gtggt 445

<210> 1206

<211> 383

<212> DNA

<213> Ctenocephalides felis

<400> 1206

catataactg tatgaacagt actatataaa tgatgogtgt attataattt cgagttaaaa 60
cattttatatt gtgattatac ttgtgattta atatacaata tctattttta gttatgacat 120
gttaccgact caaaaaagtt gatataattga atttttatat aattttaaact atttgtgaag 180
agattttaata cttctattta tgtataattg taaataataa atacagtatt aatttgttgt 240
ataatagaag atattataag tatattttaga agcattgatt attaattctc ttaagcggtc 300
ttatctttta aactgttatc acattttctaa atgtttaata aataaaccag ttgaaaaaaa 360
aaaaaanaaa naaaaaaaaa aaa 383

<210> 1207

<211> 350

<212> DNA

<213> Ctenocephalides felis

<400> 1207

caacgacgac gacggagatg ccaaccacgg aaataactga ctacaaccac agaagaacca 60
accaccacca cgaagtcaac aacgacaacg agcaatacac caactccagg atttccaaat 120
tggtgtctat aattggcaag tgataagata atatccacta ttcaaataac tattaatgtt 180
aaaaaaaaat tcagtattat aaagaacaca aacaatatta ataataagtt attctttata 240
ttcagtaaca gtattaattc tgnntgttta tgtcggtgta aaaattatac aaataaatta 300
atttggaaat atgaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 350

<210> 1208

<211> 147

<212> DNA

<213> Ctenocephalides felis

<400> 1208

attaactact tttgatgcat aaaaagctgc agaagagtgc actaatcgat tatgttgagg 60
ccacttcatt aacacctttg ttctaggtat gttatatacc tctggtttgg ctagtcttag 120
aacgcattgt ttgtgtgagg ctttagt 147

<210> 1209

<211> 304

<212> DNA

<213> Ctenocephalides felis

<400> 1209

caacttttaa tgatattcaa cttcaaactc acgtggctaa tattttccaa gttgatagaa 60
gtaaaattaa aataactcat acacctgaaa cttcagtaac tattctctct tgatttcagt 120
attaaaatat aataacaaaa agtgataatg taattttgtt catgagtttt tgctgaaatg 180
atctgaatat ttacctgttt tcgaattacc aaacattgaa aagttaaaaa taaaaaatat 240
ttattacttt aatttatttt agcatatgaa caattcatat tgttactta taataaataa 300
tagt 304

<210> 1210
 <211> 498
 <212> DNA
 <213> Ctenocephalides felis

<400> 1210
 aaaaggagaa gtttctaaag acnatttttn ttntacatgt acctagttag tgtgnggggg 60
 ggaaattgct attgcatatt acatacaagc ttaataaagg ttatggtgat ttatttcatt 120
 taaaggcaan gtatcggntt aatggcnnta aatntatntt ttatttaata ttaaatagat 180
 taattaaaaa tctataaagt gataagaggc ctgatatcca taatattatt gaatattaag 240
 aagtgcgga tagatctgat aatgtagtag ttgttataga caatttactt aataattatg 300
 agttgcatca ttatgcaatg atttatcact attattttatt caacatttta tttaactgct 360
 tgcaactttt aataaaacgc atntttttatt gttttaagta taaatcttat tagggcacia 420
 tatgaaaata aaaataaaga actttataca aaagctnttt tatcaatatg cttcttgccg 480
 tattaagtta agaaattt 498

<210> 1211
 <211> 342
 <212> DNA
 <213> Ctenocephalides felis

<400> 1211
 caatgcacaga aaaacctcgt attgntatca ctaaaaattc aattccaaca agtgatctgg 60
 cttatactag ggcgaagaa aaaaaggcga acaatgtaga tattattcgt aagaacagcg 120
 acacttcgaa taaaactgac tcgtaagaat tttgtgaaaa gtgtttgtga aagtattatt 180
 ttgtcaaaag gacgatttag gctatgtagt gactgtatgg ttaagaacta tattagaact 240
 tattgctcat aaatccaaac atacaataat ctttataaaa atcttaataa tttattaaat 300
 atttttacat aaaaaataaa aatagtaaaa acgcaaaaaa aa 342

<210> 1212
 <211> 487
 <212> DNA
 <213> Ctenocephalides felis

<400> 1212
 tgaacttcat tatttaaatt taatcanagn ntatttttta aacaaaacat agtagcggng 60
 taatataaaa aatacattta tataacacat taagttttaa aaataaaaga aagcaaacta 120
 caaaacaaag tttaaatttt tcaaaatcaa aaaccgtaga ataagtatca attataagaa 180
 tttttttatt gcttttttaa tatttttata taacttacat gtaataatac atttctttat 240
 catagaaact ttttatacat gctattatta tctatatgta aaagattgtg caaaaatatt 300
 tgagtaaatt ttcaaatcaa aataatacga aacttataat caagcgggta atgtaatttt 360
 tttttgtctt tttcgacatt attatcttaa ctgtttttaa gacttagttt gtgtttctca 420
 atctccaaaa taatttatca ccatgaaata tctcttatca tatattttta aacttaattc 480
 tataggt 487

<400> 1216

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caatgacaga aaaacctcgt attgntatca ctaaaaattc aattccaaca agtgatctgg 60
cttatactag gcgccaagaa aaaaaggcga acaatgtaga tattattcgt aagaacagcg 120
acacttcgaa taaaactgac tcgtaagaat tttgtgaaaa gtgtttgtga aagtattatt 180
ttgtcaaaag gacgatttan gctatgtagt gactgtatgg ttaagaacta tattagaact 240
tattgctcat aaatccaaac atacaataat ctttataaaa atacttaata atttattaaa 300
tattttttaca taaaaaataa aaatagtaaa aacgcacaaaa aaa 343
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<210> 1217

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1217

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catatgtaga aataccaatc aattngntga ttacatcaaa aatatcaa atgttnaattga 60
acttttcttt gaaaaatata gatgaactaa ctattgattt gccacaaatc atatcgcaaa 120
catttggaat tgtgcagaaa actgcaaata ttataccaga aaaagacgaa acaacanttt 180
cagataaaca acaaaatatt gctaataaag atttgtatga tccagagaag tttgaccaa 240
tgccagggtc ttggcccggt gacctaccat tgcctatgcc ttgttgggga agagaaactg 300
atgcaaagtt agatttttca tcagtaataa aatatgaggc atttgccagc agagtagaaa 360
tgacggaaca gagattattg gaagagacca actatgatac tgtagataac tttttacaat 420
tcagccagga atatagaaaa atgaggggatg cttccgaaca aattatgacc tggataaatt 480
cttncgtgct tatcacca 498
```

<210> 1218

<211> 420

<212> DNA

<213> Ctenocephalides felis

<400> 1218

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ccnaanntta atccctgttg atatagcadc acgaaatgct cccatttga aactgcccac 60
tgngtatact ggctttgctt ctttggttat ctctttctca gaatttactt ggtctgcaag 120
tagttttatt tgcattacgt ctctgtaagt ttcttttctt tgtaaaacag ccatggcaga 180
ttttgctaaa gcagaaactc gttttattcc actttcagac gctccaggaa acatttcgga 240
tcctacatta ctacatctgc ctaacggcaa aacccaatg ggacaagttg caccatctgg 300
tcggcgtaac attcctgtaa cagtttcagc taatgttcca tcacctcag caacaagtaa 360
agcgtctggt aatgtaggca tttcctctat aatttttcta gcgcttcctt ctgcagttgt 420
```

<210> 1219

<211> 183

<212> DNA

<213> Ctenocephalides felis

<400> 1219

caattatcta gtgaaaaaat gtctcgattt tttttgcacg tgactcaata atctagagtc 60
aataggtaaa tagctatttc cactgaccag aaatttcatt tcaattgact tagctcttat 120
ttccgtattt taaacaagtt tcaataaaact taagacagtt ttaatatattc tgttttgccg 180
ggt 183

<210> 1220

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1220

cctgcaaaaat ggtaggactg ctcaatattg ttttattagc ttttgcatct gttaaactttt 60
ctttgtaatt ctcaattctc cataccatgt gcccogttcc attaaccggg tcaactcaaag 120
ccttatggaa ggcccttgca tcttctgcat cttttatctg ntgtgacaat tgcgccacca 180
atctctcttg ttttaaccaat tgccgactta atttatccaa aatatctgta ttatcttgaa 240
ctgtgctttt catagatttc aattcgtata aaaaagaagc tattcgagct ttttggttgt 300
ccaactcgtc tgccgttttc gtatgatctt cataaaagtt ggaagccact tctcgtctcg 360
ttttttgggc atctttttgt aattgtatta ctgattgctg atgagancca tgtcttgtct 420
aactcattta ctcttgcgaa gtttttatcc tgccgttaat acgacctcga cttgggttct 480
tggtttcttc atctagtatc 500

<210> 1221

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1221

aaactacaaa ctacaaaata attaagatca ttatatgaat cacataattg tataactaaa 60
aactgcattt tatcataaaa attgntataa ttttttttta taaataataa ttattattat 120
tatcctgaaa aattttgaga attgacaatt tccatacatt atgccactga atcataccga 180
attctgtcaa aatatcatgt atttgctgtg cattcaggcg ttttacacat aaactgcaac 240
cgtcaatcgt atgttatgaa gctgagtcag aaagaccatg ttatataaca tcgttttttg 300
acgttttgtt ggtttctggg tttttatgtg ataacttgag aaatcgctg actgcagagc 360
aaccgcatgg cttttgcaat attcagtatg gaaagntgtc gtatcatagc cttgcataac 420
ataagtctgt tatgcggccg aatcggccat taatattaaa ttttgatgtg atttttagaa 480
taaaatatgc tcagtgtt 498

<210> 1222

<211> 402

<212> DNA

<213> Ctenocephalides felis

<400> 1222

ccgnaagggt acanaaattg ataaagctaa aaaggactta ttcaagaaaa ttactagtca 60
gttaattggg ccgtagtatt agtgagttat tcagaaagga agtaaaaatt gcaaatctcc 120

<210> 1226
 <211> 295
 <212> DNA
 <213> Ctenocephalides felis

<400> 1226
 tggttagggc ccnccccgg acaaaccaca antattaaat tagaggagag gtttttttag 60
 taaaaaaaaa aaaaantaaa gggcaagggg gaaaggtggg atgcactttc ttaaataaan 120
 nnactgntaa ataaagntta tatttatatt aaattacaat taggactaca taatgcactt 180
 taaaaattat ggcatagtta agacttcatt agaaatacaa taagctacaa ttataaattg 240
 gattatattt nggattttta tcataaaaga ataaatcat tcagaatgca aaaaa 295

<210> 1227
 <211> 335
 <212> DNA
 <213> Ctenocephalides felis

<400> 1227
 ctggcacttc cccaataaaa aacgccannn aaacctaaaa ataggnaatt aaataagact 60
 gggngagcagt gatgatagcg gagctgtgtc tcttgataca actacaacaa tttctccttt 120
 aaagaatgct gcagataaaa ctgngaagac taattaattt taatgccaga taaacttgat 180
 ttttgatata catatgttgg tatgtagtta tgaatttaat atactttaat taaaccatt 240
 ccaaaaatca taattcatat tttttaaatt tgatttaaga aatcttaatg tgtaacttta 300
 ttttgttttt atttagagct gnaaagtttt attgn 335

<210> 1228
 <211> 225
 <212> DNA
 <213> Ctenocephalides felis

<400> 1228
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 ngggnggggn tattgggang aaaaaaagta naagaacccc aanntattgg ccccgcaa 120
 aatgcatgtg aataccttat ntcataaatg gcgggnctat gggctttggg cacaaaaatg 180
 gctatcaagn tacatgtcct gnaacaagnc taaggngctt tcgna 225

<210> 1229
 <211> 435
 <212> DNA
 <213> Ctenocephalides felis

<400> 1229
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 gggngngtgga aaaccagcgg taaacttgga aaaaaatatt ttggatacaa agttaaacgt 120
 gctgatcctg aattaaaaaa aggntgngat aaaacctgtc ttaaaaaatca tatgtgtgca 180

caactgttga agatgagaag aaaccagtta ccaacggaac tttaccaaag attgaagaaa 60
 agtgtgacag cgttgcagac cttaatggat ccataaataa atcttttagat catctaaagc 120
 caccagaagt agcagttgct gatataca cctgtattcc agaaaagaat aaagactttt 180
 tatgtggtat cagagaaagt cagctcttan atcatgaact gcagtgggac tccatggaag 240
 acaaggaatc caggcagaac gatgatgcag agtcggacca tagcgaagaa gacgacttgg 300
 gtgaattgcc ggtaagaacc gtattggatc agtatgcacc tctaggt 347

<210> 1234

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1234

tataactata ataatggggc aattctgctt cataacacat agttgtcatg gcaacgcgta 60
 gtgaagactt cgaaaacggt aagctatatt cggtgcgac aggcgtnttt tacatataaa 120
 catagcaaga aagaatgtta tgaaaacagc atcataagat tcttctttgc ttgtttatat 180
 gtaaaataaa tgtagacatt ttnatattgc catgacaacg ttatattatg agctctgtta 240
 cgccagaatt gcccataag tttaaatatt cttcaatnat ctttctccat tggtnaaaa 300
 atattttatt tacagtnnta gcacagtctt gtgaatctat ttgcgaattc tacattttaa 360
 taataaatat aaaaacanct gaccgccatc cgcatactag aagaaacatt ccaatctgat 420
 acctcattcc atttgntcaa aatnaaaaat aaaattacag ncgactgatt tattcctggg 480
 tgcttaaaaa aaatccnt 498

<210> 1235

<211> 337

<212> DNA

<213> Ctenocephalides felis

<400> 1235

ttttataagc agaaccacca ggtgaaagat aaacgttcca ggatcctgca ttattgaaaa 60
 ctttcagaaa attaccagat aatttatatt gtatacaaaa cngtctgtta tatgcagcag 120
 cctggatgga agatggtaac tttgtatta gtttgnaac tntttcttt tcatntggnt 180
 gaaaattgga tcgatnatac acttttttga cgcgttgac aaaagtga aaatcatcgt 240
 aattattggt tngcaataaa tcattcacta caaataaccc atgaatgctc agtggtnagt 300
 tactgntgna actaacaaaa tctatgagag aaagtgt 337

<210> 1236

<211> 351

<212> DNA

<213> Ctenocephalides felis

<400> 1236

taaccoccta nggattccct tccngccng aannngtta acnggncgg cgggcccagg 60
 gtccatccta gggcgaaaat ttttaataa gaaataaaat gaggtcgcct tctttttgaa 120
 aaccatttt gttctttgnt aagcagnatc ggcaggtgaa acataaacct gncaggatcc 180

<210> 1240
 <211> 446
 <212> DNA
 <213> Ctenocephalides felis

<400> 1240
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 aagnattggt taatctgaat gtttatatat attgtatttt caagattatc ggcactatgg 120
 tttttcttac aacattcata ctatacaatt ataaaaatat atgcantttt tgnntgnnta 180
 catattggng gataaccac aaataatatg aaatggaaaa aaaaatgtaa accggngaca 240
 caaaatactg gagacaatta ttataacang ggatattcaa cttttaaant ttcatacaata 300
 gntttttatg anctcgcttt tgaaggattc attcatttat tcaatccaat gncnaatcat 360
 aaattttattg gnntttaggg gcactactat attggattaa taaganaaac aacttngtta 420
 tgaaaaaatt caantaaaac catggn 446

<210> 1241
 <211> 274
 <212> DNA
 <213> Ctenocephalides felis

<400> 1241
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 gattttaatta ttttatataa ttatatataa agaaactgtt ttacaatcag tgaatatttc 120
 cacaaaatta ttaaaactat ataaatataa tacaagtcca tcataggtat gactactttt 180
 gacgaaatat tcataatttt gaccaactac cctctttcat aattttgacc atattatcaa 240
 gttaacccaa acttatctta aatatgcat atgt 274

<210> 1242
 <211> 102
 <212> DNA
 <213> Ctenocephalides felis

<400> 1242
 tttggatcca ttcattttat ttacaactta ctatgtaatg taaattaaat gtgaatgnga 60
 ttattataat aagtgaaaat gtttggttatt caatcacatt gt 102

<210> 1243
 <211> 193
 <212> DNA
 <213> Ctenocephalides felis

<400> 1243
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 tgggnaaaat tcttacagaa ttactgaaac ataagataaa atatgttcaa aaatatgatt 120
 gacgtatcac tggcagcttt gtaatattaa tattgaacga tatgccaatt gcaattgcga 180

aatatattat agt

193

<210> 1244

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1244

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cagcgttttg agtaatccca aaagtaaaac cgctgataat gtaactgcta tgatcaattg 120
gagagatcta tcttgatata agtttcctac taaccaagca cctcgccatg aattcacaca 180
tataaatcca taaacagcgg tgtagacca cgaagatagt gcaaaacatg tgtttagattt 240
accttctaaa tatcttttga tcggtccttg tgccaagcaa aatataaaca tcccaataaa 300
gcctatggcc aaagacacga aactgctata tatttcatta tctgtataaa cataatgtcc 360
cattagattc cacgtgcctc tccaataccc gactacggcg ggcgcaacca gtgtagagc 420
aaatagagca tccaaaacat caagaataac tgatgatttc aaaggattca tagtcatcaa 480
tgatcaccgg aaggtctc 498

<210> 1245

<211> 112

<212> DNA

<213> Ctenocephalides felis

<400> 1245

tttttttttt ttttttttat aaaataatct tttattccaa acgtttcgac attcaatttn 60
ggngtcatca tcagtggata ttgaacatag tattttatat ctaaaaatgt gt 112

<210> 1246

<211> 379

<212> DNA

<213> Ctenocephalides felis

<400> 1246

aaccggttggc aaatatcaac ttccacatca tcancaaatg ttttatccca atcaggcgat 60
gaatccaaat gattgaattc attacactgt tcaggctgag tgtaaaataa tgatgttgga 120
ctttgaggcg gagtaaaatg atttagttcc actttatcat aaatgcgttc aaattctcgt 180
aaaagactct cagtgtcttg ttgaataaaa tctgtggtat caaattgctg aggaaatttg 240
gtttctccgc ttagagtttt gttcatacca gttgtagtag acaaatcctc cagcagaggc 300
aaatccactt tctcctccag ccattgagaa aatgcttcat tagtaaagtt atcttccagc 360
aagcacgaat cagcaaagt 379

<210> 1247

<211> 230

<212> DNA

<213> Ctenocephalides felis

<400> 1247

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ccttgctgaa actnctcctg atatgggcga tttttttatt aaagcaagcg aaaaaaaatn 60
nggnaatgaa tgnctcagta atcttaatgc cgaagcacaa gaaaaatttg ccaatagagt 120
caacattata atcaaacaag ccaaaagtaa agggtttggt taacataata caaaatagca 180
attagaaggt ttagaaaggn ttaataataa ctaattttgt acctcggacg                230
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<210> 1248

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1248

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attcaacctc cgcgtctaaa ttcataagtc cactttttcc atcttttagga ttagttaaat 120
tcgataacaa gattttttaa aacatctgta attcaagtaa atcactaata aaaaaatctc 180
tatgtgctgg ctgctcaaga atacttaagg cttcaaacc cagagcaacc gatgattggg 240
caatttcatt agcatcatct ccagcaataa natcaatctt gaactccttt tcttctatct 300
tatcattaaa atatgcaaac ataatttctt cttcagtttg actatcatca aatgccactt 360
catagggcag cttatctaaa acaacacgct tcggttcctt gcagtgtatg aattgataaa 420
cgggtcgtgtt accaaattca agaatatgtc taacaaccgt ctagtcctac ctttacattt 480
cttttatttt tgaatcct                498
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<210> 1249

<211> 290

<212> DNA

<213> Ctenocephalides felis

<400> 1249

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agtatcagta ggagtgttat gtgcaaattt ntaaatcgng tatataaaat atatatggta 60
tagattaaat gaatcagaac aatcttaaga gccacaaggt gtatggcatc tagaggatac 120
cgagaggata ctaaaacgaa atgatagatt taaaaagtggt ttccacctta tatgtcttca 180
aaatatgtaa ataaaaacat cttgaataaa ataatttctc aatgttngtc tgaaattgaa 240
agttgtgatt aaagtttatg ttactagatg aaaaaaaaaa aaaaaaaaaa                290
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<210> 1250

<211> 345

<212> DNA

<213> Ctenocephalides felis

<400> 1250

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ttaaataaga caaagaaatt cactccacca nttccctata ctatcccttt aaagcccttt 60
ngncacttca acgtccacat agntttccac agatggcgcc acatagaaat cattgctttt 120
ttataatcgn gttcgaaaaa atcttatctt attgttagtc tattaattaa gagttaagtt 180
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<210> 1254
 <211> 318
 <212> DNA
 <213> Ctenocephalides felis

<400> 1254
 cttaaaaaat cgccccacaa tagttaaagg canttggacg atagcaacta aataacataa 60
 anggtattat ataaagattc caatcaatta tcatcgtcac cgtcgtcgtc agccacaaag 120
 aagaaaacca accagtgact gatgatccaa cacgatgatg atgatgatga tgatgatatg 180
 tatatatgta atgttttacg gtgttaattt actattatcg gacgaatcaa gattttattt 240
 attaagatat gggaaggtag tcacaaatat ttttttntt aaatngatng tnnccattc 300
 ccaaaccaaa ccaaacca 318

<210> 1255
 <211> 312
 <212> DNA
 <213> Ctenocephalides felis

<400> 1255
 gtatttggtta aataaaaaata agtcacatct tanttctgcc aataatatta aaaatgcaac 60
 atntatccag atgcaactaa ctgaatatca ctttcaacaa ctcaagacgt acagatgtta 120
 cgataaaaaa acagcccaca ataaatcctt gttgcatatt ataaaataga tgcttcaca 180
 ttggttaataa ggctaaataa aatccaacat caccagacc aggatatgat ttgaatatag 240
 caattaaagc tgcgagactc gttgctaata acataggctc atgtttgaga cgaagagaga 300
 gcggaagcaa gt 312

<210> 1256
 <211> 135
 <212> DNA
 <213> Ctenocephalides felis

<400> 1256
 aaaaaaagtt atactaaaaa aaatttactt gactgagcac ttagtacaaa aaagttatac 60
 taaaaaaatt tactcgactg agcacttagt acaaaaaagt tatactaaaa aaatttactc 120
 gactgagcac ttagt 135

<210> 1257
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1257
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tccagtaatg gttttaataa aattatgccg atctacattt tctaaacatc ggcaaaatta 120
aatcacatta taatgttaac ctttcaaaaa aatactgtcc aaaaagtatc acactttgat 180
ctacaaatgc aaaatgggtg aaatcaagtg aagcaatgtc atttatacat caaaagccaa 240
tttagagtca cttgtgttca ccactttgt ttataacatc gtcaatcaag gcggataaca 300
acagtgttta ttgtaaataa attatttcta ataaattgac aaaccatcgg gtaacaaaac 360
aaaaaagtta atactgcttt tcagctttgt gatgggttaat ggttatgctc gaataaagca 420
ttgactgtgc catcaagaaa gtatactngt ttccattagt atttcgattt attccaattc 480
caatcatatt atcacaataa 500

<210> 1258

<211> 485

<212> DNA

<213> Ctenocephalides felis

<400> 1258

tacttttact ttgtaaaatg taaataatag gantcactga gacttaaatz atccattggt 60
attcatacaa gttaatzgata tctgtgaggt atttaacgag caaaattatt ttgattctta 120
agaagtatga tgtttatagc cttcttaaga agttatgata ctgttatagc cttcacactt 180
tgagaaagat aatagaaatt gttctcacat aaatattact cattagcagt ttaacttaaa 240
aatgaaattc ttattcaaat ttgaataaaa aaaagttgca tcaaagtatc acagtataca 300
acaatattag aatcgatatc ataaattgtg ccaacattct gtgttgccac tgatatcatt 360
attcatttga aatatcaatz gaattatcaa ctgaatagag aagtatttgg ctgagcttaa 420
tataatacta atagcgagat ctgaaattaa caaagttgaa aactaaatzg tattatttta 480
ttagt 485

<210> 1259

<211> 232

<212> DNA

<213> Ctenocephalides felis

<400> 1259

tgtaaacagc actttgcctt ttaggtttt atcgaaggct tcgctcaagg ttttgatggc 60
tttggtgagt tcagtttttg cttgtcggg ttcttcgggg gatttgaaat ttgttgctaa 120
gcggaagaag aataagctag gacgttcac aggggttagt tctaagactt tgcagataa 180
aagcgttgag gacaccaggt cttcacaaa cttctctggg aaatcacttt gt 232

<210> 1260

<211> 371

<212> DNA

<213> Ctenocephalides felis

<400> 1260

tactttataa aaaaaaaaaat caaatctaga ccaaccaatz atgagagatz agcgcagcac 60
cattcaatzg taaaatttat attttagaaa aaattactta aagaataata ttgtattgct 120
cttcagattt atcttcagaa atctaaatz attttgaaa tagcattgcc aaaacattac 180

ttctctctac aattctttgt aattctctga cagatatcaa gttatcatta tctgtgtcat 300
 actttcaaaa tacaattaat tattgttaac gtgcatacat aaactttgat ttattataat 360
 ttaccttcc cgaatagga tctgatatat tgatcagttt ccctcaacgg tatattatat 420
 tccatctcta attgtgatat ccttctctga gt 452

<210> 1264

<211> 490

<212> DNA

<213> Ctenocephalides felis

<400> 1264

tttttttttt tttttttttt tttttttctt tactagatgt ctttatttct aatcccaaaa 60
 tattatatgt cgagngtctt cttttatcag aaggatcgac atccttcaat gcacttttct 120
 ttccaaaaat gcttaatctt ttagttctta atttttcaga gttatgagaa tcatttaagt 180
 cactggtgat tttttggttg atttcattaa tactggctaa agatctgcga cgcatagaat 240
 ccttttcggt atcatttagc aaatgaatgc catttggaga ttcggttaata tacaaagtag 300
 ccattgtttt ggctttgaaa taccatttat tggtatatat cacttattag tttacaataa 360
 cactggtaaa acatagcatt ataagttttt gggtcacatt ttcactcaca aacacgcggt 420
 cagtatcgc gcgagtattg tgaaagcaac agacgaaaca ctgcggttaa atgtcacacg 480
 gtgttttctg 490

<210> 1265

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1265

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 aacagaatgc tacctcgata tgaggatgtg atgatagggc aagaagatac tgacgatgat 180
 cccttgccat aagtgaatat tataatttta ttttttcttg atctccttac aatgatgtag 240
 aatattgcct tcaagtcata tggtgtaaat agttttacia aatgataatg ttatttatct 300
 attgaatata tgtatgttta tgtaatttat ttaaatatta atttattaac agatgatgac 360
 tagaagtcac aattgtgtta ttgaagtgtg tgcattgtaa tgaattatct ttaaatagat 420
 atattcaaat aacatgaaat aaattttgta tttgtgattg gtgaaagtga tggaaatatt 480
 ttgttgaata caagcata 498

<210> 1266

<211> 311

<212> DNA

<213> Ctenocephalides felis

<400> 1266

aacaattctt tgttttaata tcgatatata atcacgattt tagtttatga tatctttatc 60
 tgggctcatt gtgaagattt catacaaaa tcgatattaa aatattgata acttcaataa 120

taactgtaat ttccatagat atttgcaaga taatcgataa atctatcaat attatcgata 180
aatatatttt ccccttttta gtcgaaagta ttatatagat tctattaaca caaaaacaca 240
cagacacaca aattagttta agtttagacg acattccggt gaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaa n 311

<210> 1267

<211> 453

<212> DNA

<213> Ctenocephalides felis

<400> 1267

ggccccgtac cggaagtgtg agctggcaca tttgacttaa cttcattttt atcttcatac 60
tcaattatat tttcntttac cattttctcca gcagaagggtg tcacattctg tgttttctaaa 120
tttgtatttt gataatcatc actaaatcta tttcgggatc gagaccgga tctgcttctt 180
ctaccttta attctttcct tgtaacaaac tccaaaaatc cttcagaatc tggcatcaca 240
acaggttcct caggttgtga atcogcttct tgcacgcata attggaaaat tgggtgtgtt 300
ttgggtgttc cagctgaatg tttttcaaaa atattcgatt ccgatgattg tggcacttga 360
gaaggcaatt cgctattagc tttgatacca acaatagacg cccatgatgt cagttttggt 420
tggtcaagta gactcacata gcggttggtt agt 453

<210> 1268

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1268

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cacagtggcc aaaaggttta gaatctgaag aaaaacaaaa taaacatttt cctgttacag 180
taattagttc tgattattgt cacagcggtc cgactataag aaatccatta ggtagaattg 240
ttactttgaa ggtcaaatta tcggatttac cactagacaa gcatgctcgg gataagtttt 300
tacggttagt tgggtgacaga cagcatcctg atacagatat attaacatta gtagttgata 360
gatgtccact gaggaacaaa aattatgact atggcatgta tttgctgaca gctttgttcc 420
atgaatcttg ggtcactgag ccttggaag cagataaatc tgaggcggat atggaatatt 480
acgattggca aaataatg 498

<210> 1269

<211> 285

<212> DNA

<213> Ctenocephalides felis

<400> 1269

tgctgctttc tgctagttag gtatttgctg tttctaattg agtatttggt gaagtattnt 60
ggcttaaggg ttgtgattcg gtgaggtttc cattgctttc attcacgttt gaacttggag 120
cagttgtgga tgggcttatt tcatcattcg ttgactgtgg ttggtcgtct ttaacgtcac 180

tgtctgggaa agcaatagta aaagtatgat tatgagtga tttttatttg ctcgactatt 240
attattatct tactaagcaa acgcctgggc ccagggtcag tctgt 285

<210> 1270

<211> 498

<212> DNA

<213> Ctenocephalides felis

<400> 1270

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cttgtgattc aacttgtgca aatgtaagac catgtgagct ggctcttggt ttattatgca 120
cccaacttga tagctgtgtg tctcaattgg aatctcatac tgctcaaacg atgcttaaatt 180
tggttgattt tgctattcac atgcagaaac agtgcaggat tcttgactcc agcttcttca 240
gttgtcacgg ttgtgttgtc aacatactgt cgaggtataa caatcaagat aaaagtccac 300
acaggcaaag acttgttttg aaattatctt cgcgcacatt gaaacttctt cgaccaacag 360
atcgtcttac atcacttctg cccactattg atgaaaatgg atgtctacca aggcttagaa 420
ctggcagtggt gagttctgtg ggcagtgaag atactgaaga ttggcccacc agtctcttgg 480
gtcccgttgt gagcaatg 498

<210> 1271

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1271

ccaancggtt ncanttgggn ntnnnccnat tttnaattgn angggcccgg gncntagggg 60
gtaantttaa ttggnatttg ggcnttncat gacngngcan tnagcttctt gacnanttct 120
ttttacacat atttttanaa tgatcatata catanttagg tgggcattcn aaaacctgac 180
ctttaccatc tttgcagaan aagnatnttn tgcnnctctt tcgnatctgg ctgatatcct 240
acaaccgccg catgtanntt ctgccgtctt acagctttcc ccagggtttt gatgagcaca 300
tattattcta cacaaaatgg gaaccatttg gaaatttgan tccttcttca aattgattgt 360
angaaatttg ggggtttctt tgcncnacc cacaactttt aaaagnaaaa acaanctnna 420
naaaaaagnt cccnacntgg ttattnaaat ncnttgggccc cgtaccnccc ttaaacccaa 480
ttttgtnata ntcnnnanaa 500

<210> 1272

<211> 157

<212> DNA

<213> Ctenocephalides felis

<400> 1272

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cttttgtcac ttttattana ccaatatcag catagttgac agtaattttt ggngtatatt 120
tatgatgcat cacaaaacgt tcgacgtcgt agtatgt 157

T.D.T.T. = 926T6560

<210> 1273
 <211> 235
 <212> DNA
 <213> Ctenocephalides felis

<400> 1273
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 gngatatcgg ttactaaata ccagtatgtt tcttcacaaa ttctcttatt tctggatcag 120
 ctagtcttgt aaatacattt ggatatggaa aacttgtgca atttctagtt gaaaaagctg 180
 tcaagcctac taaaacccca ttttcgtcaa cgacgggtcc accaaaatca cctgt 235

<210> 1274
 <211> 400
 <212> DNA
 <213> Ctenocephalides felis

<400> 1274
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 aaaccccgag gaaactaatg tgattcacgg tccagccgag cctgccaacg aaggtttgag 120
 gggcttttga gaggaaattt atgacagaat agttttacat ggcgatagag tatccatgat 180
 cgacggagac accgatcgct ccaccacctt cgacgccctt cgggcacgca gtgcagcaat 240
 cgctctagcc ctaaggggtc gtggagtgtc caacaaagac gtcataactt tggtagaact 300
 caccacagaa gactcttttg ccattgtttt ggggataatt ttctcaggag ccacttttagg 360
 gatgttggat ggagcctgga cagtcccaa cactgtctagt 400

<210> 1275
 <211> 343
 <212> DNA
 <213> Ctenocephalides felis

<400> 1275
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 ttgtgagata attataaatt atattatctg ctaccattaa acttaagtta ttgttaaaca 180
 aaactaataa attgtgtgtaag caaacgtttt taattggtag actgggtcaat tttatgaaac 240
 aaaaataatt aaaagtttgg taaagtttct gctaattttt tttgctcaat tgtaagcatg 300
 ttaagtaagg taggtgtctg ttttaataaa aaaatgaaat tgt 343

<210> 1276
 <211> 204
 <212> DNA
 <213> Ctenocephalides felis

<400> 1276

<210> 1280
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1280
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tcgtttttat atgaaaatta aataaacact atatattttg cgcttatatt gaaacagaaa 120
atactatagt tcaatgagtt ttattaaaaa tattgaatta ttttacattt ggagataaat 180
aaaatggttt ataattatat gatatacgca tgagtaatta tgagtttgcg ctaaactctca 240
atcaccactg tgtagattca gctttaacat agccaatcca actgtaaaga gagaaggaat 300
aatgatagg ataatggca ggaaaggatc aacaaatgcg accatacata tattccatca 360
taataatgag acatacgtaa ataataaggn gagggaaatc ataatgggat tgagaacatt 420
aataaaattc aagaaaactt attaaaaatt ttcagtgtgg tgtcttctgt cactctctac 480
aaaggtagta aatctgagga ggtcgtatca aggataagaa atcactaaga tgaggatttt 540
attgcaaat 549

<210> 1281
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1281
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ttgtttttga ccctagcata gacgctaaac aaagatccaa attgatagaa aaggaaatga 180
atgaacaagc aaaaatcatc catgacttga gaacattggg tgcactctca ggaactatag 240
aacatgaaat gagaagactc catgaattgg aaaccttaat ttttaaagat tttcgaagag 300
atatgataaa gaaactgcgt cgacaaagta tgcgcacaac agcaatcaag gataagttgg 360
gttttgggtca acacagtact cttagaagtc gttacccgac tattgaacaa aatattcaaa 420
tgaatgggtc ggttctcgag acgattgcga gtggcgatat cggcggagat ccagcccagg 480
tggocatccc gatctgtttc ttaaagtgcc gggcagcacg tgttcatttg gagatcccta 540
cgttcttag 549

<210> 1282
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1282
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tttaatttaa acaatcagtt atgttaattg ttagttaaatt ggatagtttt aaacagtgag 120
caagtgttga agtggttaagt gaatcagtgc atttaagtgt gtatgaatga aatagtgttt 180
ccatttggat taactggata cagattttac tgaagacagc tggggaaaat atggcgttct 240
gtcagtttgc aatgatgga taattattaa actaaaggac ccggcataat gaaacctgaa 300

aatccacaaa actaccacat gaaaatctaa aaatttttagt caatcttaac gaaaccaacc 360
aaagcaacaa aactatgaaa aatccaacaa catttccgct tgaactgtca tctaaaccga 420
atcttttagat ttcgtagttc aacatcaaac cacttcaaga catctttcta atatttataa 480
ttcacttata cgcttagaca agacaacttt ctatgacggc tcgattgtgt ncaaattggtt 540
gtaaggcat 549

<210> 1283

<211> 383

<212> DNA

<213> Ctenocephalides felis

<400> 1283

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ggtagtttta tttgttggtta caatggcaga agacacacca gatgaaaatg agaaattcga 120
agtgggaatg tcagagggtt ctttgaatga tgtagagcca gcaccacgtg tagtatgcca 180
acttgaggga aacagattat gcaatgctcg gtgcatatct ctaggaaaaa gaggaggctc 240
gtgcaaaaaa ggaacttggt actgcagaaa ttgaagaaat ttaatatagc ataatatatt 300
agataaactt tgaataaaac cgtgttaaaa attttgcgca aaatatataa tatacctaca 360
aattaaaaaa aaaaaaaaaa aaa 383

<210> 1284

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1284

gcgcacgga gcggttcctt aagaaacatc tatcogtcaa tctatcaaac ttgtaaccgt 60
taaaaataat tataagagaa taccttaaaa taaaaggtag ttttcgttta aaatatcctt 120
aattgtgaac tatgtgataa taagtgtttt aagatagtg ctaggttaat atttttgatg 180
acgagaacag aataagagaa caaaacggga tactaaaaga caagagcttt gtttgacacg 240
acagttgacg gagactagaa tgcaattgtg attttgaata tattaaattt taaaataatt 300
agaaacaaaa atgtcgacca aagacatata agctcagaca aatggggatg ctgacatacc 360
tcagcggcga ccccaacata ggggatgttg tagcaaaatg ttatatTTTT ttaaagttaa 420
ttggagaagt tttgtaatag tatttagcacc aatattatta accccggctt tcttgtaata 480
atgaaccgaa attccggtga tgatgtagtt atgtaatgct gatattgggtt accgaagttt 540
acctctcca 549

<210> 1285

<211> 541

<212> DNA

<213> Ctenocephalides felis

<400> 1285

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ttcaagagga cgactaaaga agaattagaa gcacttaaag aggctgatca gactgcacca 120

ggaataagtg aagaggaggc tttagcgcac agccatgatg ttgaaaactc atctgaaaaa 180
 gaagaagctt aaactgtgtt gaatgcaatt tcaagttgta aaatTTTTgt gctTTTTgta 240
 tatagatatc tacaaatatt tcgcagaaga agtataagaa tgTTTTgagaa tatttgaaat 300
 caagagaaaag ttgtgtcata atcataaacg tatttagatc ataagtagta aacattcaaa 360
 tatcacttaa gtagtgtaaa tatgagactg aaagtgaacg attaagcatt tttatattta 420
 aagtcatata atttatttct aagattagat atagaatatc tgtgatgaat aaattccaaa 480
 cgatatatta taaattatta ataaatcaat tctatataaa aagaaaaaaa aaaaaaaaaa 540
 a 541

<210> 1286

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1286

ccttattgca ggtgtgatag tgaaaaatat tattttataa tacgagtttt attcttgtca 60
 attttaaatt tccggtatgc aatatgtatg cattcataca acaaataaat taccCGgtgc 120
 acaattatgc agtgctgtta tttaaaagat aatgaaaatt gcataataat tagaaaaatat 180
 cataaacata ttcattagtc attttgtttt tatgtgaaaa atatgtgcat aaagttgctg 240
 ctgaatagaa gtCGgatttc ctcaataata tagaaagaaa tggttcaggc tgacccaacg 300
 tgcagcctct ggctggacaa aaacattgac agcagacgag gatctgattt tccccgctg 360
 gacttcgaca cgagttcaat gtttgaatcg aatgtccagt tgtcaagttc attagatgtc 420
 atcgactggc aaaaactaaa attccaaacg gctagtatca acagaggatc gctgaggagc 480
 aaatcatttg tataattaga ccaaagata cacattaatg gaaattcgga ggataagggg 540
 aagattctt 549

<210> 1287

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1287

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 ttaggagata tccaggtaca actggtgaac gccccgccac gccaatgaca agaaccacc 180
 agagatcccc gggccgcgcc cccattagga ttataataac tccggtcagt aaaccctcgg 240
 ggccgcgatc gcccccaaca cgtggcagaa tattaagtgc tggccatctt gcgcccccta 300
 caccggtgta tcggcgcgac gcctctaagg gttcttcgcc cagaagaaga ccagaaaggc 360
 ccagtgaagt tatgcaaccc aaaaggagac gtctagaatg aaacatccca ttttaattgct 420
 gaagagcttt ccatttattt tgagagtcaa ccaagaattg cagcagcagc ttcgagcag 480
 agataatgtg gctccaaaac tctgcctaga caatgacacc ttogaattca tttgcctact 540
 gaataatga 549

<210> 1288

<211> 384

<210> 1291
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1291
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 tgagtcccaa gtaagcttaa gaatttttga aaagcttggt tgagtcccaa gtaagcttaa 120
 gaatttttga aaagcttggt tgagtcccaa gtaagcttgc gaaatttttag aaagctaaag 180
 ttaaaaatttt tggtttcaatg tttcaatggt tttgaatcat tcttatcgga tgctcctttc 240
 tcttaaaaaac tgcaattttt tcaattgttg ctccgtatct tcgaaactgc taaacctgcc 300
 tttggcaaaa agtaatcagc aagccagtac aaatcgaatg tttttagaat cacgctcgga 360
 atcgtagacg aaaaatttta tccaaacaca cacacataca catacattcg atttttcttc 420
 agtatgccat aaatttataa agaagacctt gactcactat attaaaaatg ncatgtgaga 480
 tttttgcctt ccctaaagaa ggtgtaaaat taggaattta tcatattctt ancagagcgc 540
 ccttactga 549

<210> 1292
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1292
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 gctcttcgaa ttttttgcag aggagacttc ttaaaattga ctctaggatc attgacaagt 120
 gtgtgcttca aaacaaatca acaaaaagct ttgaaattcc tcaacgacaa ctttgatcaa 180
 cctgtgtctg caaagaaaca cataataaga ctcatcaacg ccacggtac caaaaatgtg 240
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 ttaataacgt ctgtcttcaa ttggtttgcg agtgatcccg atgaggaaat atggaatttg 360
 ttgaaatcta tttttttaga tctgacgacc aaggataaag atatattcac catgcttctg 420
 agtttcgcca agtcgacaag gattatttaa aggaacatat tgaactttgt ggaagacgca 480
 acaatttgga gtccaggata aaatcaattt ggatgatgag aagtctaaaa tctgcacgcg 540
 taacgaaga 549

<210> 1293
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1293
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 atttcggttt acattaaact acaatttatt gacggctcgtg gcggctcgcc ctagtgaaat 120
 ttttgagttg aacccttat atgtaacact gatactgcac ttatatttat tgatattgtc 180
 tgtattttta ctttttgtgt tcattattaa aacttaaaaa atgaatgtcg aagttacgcc 240
 gaactattct tacgtctttg atttcgaaaa tgaatttatt catcaagaaa cgagaaattg 300

<400> 1296

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atztatcaat tattttataag aaacaatttt aaaacattcc ttcattatta taactgggat 120
gaccggaatg aaaatggttag cacctacttt gcatttttca catgataact agcaatcttg 180
tgaggaattg tatttaggct cagtaaccca tgaagcgccc ttttgtaaca caataataat 240
gattcatcct tttctactgg ttctagataa gcttgagag gataacacaa cttttcttca 300
gggcaattta aaactcttaa taatccagaa tgttctgacc aaatttgctt tctccaacaa 360
atgtcgtggc aatgtgctaa cggaactagt acacaagctg aaaacatttc atccccataa 420
ctaacagctt gataatgtcc agaagttttg tatatagatc agtaaaactg cttagacctt 480
gtatggttgg taaagcaaac ggtgagtagg ccaatttgaa attcttcgaa atgctttagc 540
aacagaggt 549
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<210> 1297

<211> 464

<212> DNA

<213> *Ctenocephalides felis*

<400> 1297

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aatgattaat tattttttatc aagattcttt aatttgatac taaaatgttt tgctccacaa 120
aatgactaaa tatactttta aaaaacaact gactagaata tattgaaatt tacattcgga 180
tatattttaaa tacttactag accacaaaaa tatttgtcaa agtttgtcaa aaatattttg 240
tatatatttt cttgaatatc gacagtata acgctggatt tgtgctgcct ggtagatttt 300
ttcttgaaaa ggtgatatta ctctatgat ttgtatttat atgaaagtgc tttatattat 360
tttaatgatt ataaataata gtatgtatgg gatattatat aattgtgtat atcgatataa 420
ttgttgcttc aataaaaaat atttttaaaa aaaaaaaaaa aaaa 464
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<210> 1298

<211> 547

<212> DNA

<213> *Ctenocephalides felis*

<400> 1298

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atgtgtttat tattctaacg aacatgcaca gtgattctaa tttatatggt cataaaatgt 60
agaataaata aacaataaat tctttgataa atatagtatt tagctttagt atccacgtgt 120
cactaataat tttaaatgc gcatgagtc gaaactgata aaaggatgcg gtataaacia 180
aatccttca gtcacgcggt aacaattgtc agaataacac tttaatotca ttttttgatg 240
tgaattactt tgtaattaat cgcgtattct acaaatcacg atgaaagtta aggacttgac 300
attcattaga gaaagactta cattcccatt agttttatta tggcttatcg catttctgt 360
tcgagctatc gaaccaaag aaattctttt tatcatcctg agtcaaccaa atacttatag 420
ttcaagttta gctgaaagtc tgcgaaagga tattttaaga caagccatcg atctgaataa 480
gacgcogcaa taatccacct ttcacacctg gattatccgc agcatcttca tggccgtctc 540
cttattg 547
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<210> 1299

<210> 1302
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1302
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 caaaagtagc actggttagtt cttgctgttg ctgtcgccca agtttcctgc gatggattaa 120
 catggaagta ccatccatct ctttcagcat ttatgctgaa aggtaaagac gaaatgggta 180
 aagattgttc agctcctgga gaaataaagt gccaggattg tgagacagca aacctttgca 240
 ttgctgattgg tgctgatttc ttagaaacaa cattggaaac atgtccgagt ggaatgactt 300
 gcaaaccagg tacagggttg gtttagagcct ctgaaaatac attaaactgt cctgatcaaa 360
 ctctcccggt agacaacagt tttgtatgcg aatctattgg tattttccct gatctggaag 420
 actgtaagaa attccatttc tgtttccaaa tacagaaggt gttaaagctt ccacagaagc 480
 ttacctcat tctgaaatta aaatatgtcc atagaagcaa tcaaaagtca gaccagagtt 540
 gcaaaacaa 549

<210> 1303
 <211> 417
 <212> DNA
 <213> Ctenocephalides felis

<400> 1303
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 ataaataata ttttactact atgaaaagag ccgcaaaaaa ccttctacta gaccgtctgc 120
 acaaaggcgc cgtcatggcc tgcatgggca tcaccgtttt gggaacactc agtcttggat 180
 tccgagttta tcaatacttt actgatataa aacctgaaat acaaagaaaa caaatattgg 240
 caaagaacga gctgttaaaa gaaggagcct cggacatatc attatacgag agcaatatca 300
 cgttaaagga ataactccta ggatagtaga tatatttagt actgattact ccaaaaatgt 360
 atgttatata atgtaaataa gacttataat ttatttcaaa aaaaaaaaaa aaaaaaa 417

<210> 1304
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1304
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 ttttaattaa aataccgatt gaggtaatac gaagtacaat ggtggataat aaattagcag 120
 gattaacaga ggaaaagcta cgtgttttag taaaacaatg taacaaatgc ccgaaatgta 180
 atgaaatttg tctagaggat tttcccggtt ttcaatgtag tttgaaccac agactttgca 240
 agacgtgctt tttggcttcc ataaatgata cttgcttcca gtgcactaag ggcagcaaac 300
 catccgctaa taaaaaagat cggccaaagc agccaaatgc ccagacaat tctttccoga 360
 aggtaaactg caaatatgcc agtgacggat gcaaaatctc aaaaaagaag gacaaaatta 420
 gatttcacga atcggaatgt gtgtttcaac cacaagaatg tctggaaaat tctactgttta 480

tttaattgta ctggccggta tttcaacgca tgctaccttt gtgagaacat cattaaatgg 540
aacacatga 549

<210> 1305

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1305

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tatattgcaa aaaaccaggt gtagaacaca tgtaatacta gaagaatggt taaaatgcag 120
gtgaccattt caaaggaatt tgaatatgat aaaatatgca tagatggaac tcatggta 180
aatgcttatg gatctaccct gcatactctt cttgtaattc atggggcagg ttatcaggta 240
gaattttgtt tcacaaatcg gcaagatgaa actttattta aattattttt tgagaaaatt 300
tttgggcaaa gtaggaaaaa ttgccacctc aacttttatg tctgaggatg cacctgcata 360
ctacaattca tggatcatctg tcatgacttc gacaaataac catttacttt gttcatggca 420
catatcaaga agctggaaaa gggactttaa tacaaaagta gacaaagaag tagatcacia 480
aagcagacaa acgtttttcac atcttattaa gaatcgagtg agatgatttt tggctaagtn 540
aatcttatt 549

<210> 1306

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1306

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tgataaatta gtttttattt aaaggctagc gcataataat aatgatgcat ctgagcgctg 120
acatatctag tgcacttcag caacttgaga gcatcaagac agcaatagat gactcccatg 180
atccaaaact tcagctcagt actaatgaag atttggatat gataataagc ctattgcaag 240
atccagtttt tcgaagcatt gttactactc aagattcact aggtgaattg aattcccaaa 300
taacacaaca tccatcaata ttaccaggag attttgatat aactacttca ggtgatctaa 360
ttctgcggtg cccctttctc ttgatttata tgataatgag tacactgatg aacaaagagt 420
accctctgac aattaagtc aggtagccct cagagggttag gtatagcatc ggtnggggca 480
gtcangggaa cattacattc atgaagggat caatntngca atgaggcaac cntgatggat 540
attccaca 549

<210> 1307

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1307

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aaaataacta atttgctatg aaactaatag taaacaaaaa agttttttat gccggcatta 120

09956560 "TTTTT" 09956560

aaccagacaa atttttgtga aattgaatta tttatttatt ttaaacaatt aaacttaata 180
 aaaataatth catttttttt aaataattgg atgaataaaa aactttttcg tttactgtta 240
 tatctgtcgc catctgaaat actattgctt taggtgtata taaatatcta tttacatatt 300
 ttgcaggtat ctgattaata ctaatttttg aatcactggg ttatttataa aatatttcac 360
 attttttaggt tctaacagca cnacactttg ctacatttat tagtaaatgt tattaattaa 420
 ttatgtataa tactttgatt tcaactaaaa ttttgacgca aattgaaatg tgcttaagtt 480
 tacaagcagt ggccggacgt tggcaccocat cctgacttgg ggaggaagac attgtgtaca 540
 nctcatgag 549

<210> 1308

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1308

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 tctctgtctga atatgagaac agcattgcaa gaattagcca agatagcaaa attgatatga 180
 ttgccgctga attcgaaaaa caaggatttg cccctgaagt cgatagagat ttggagaggt 240
 tcaacaaaga agttgaaagg aaacttagca aaaaagttag tgaagccgca aaggaatgcc 300
 ttaaaggcca acaccaaaaa gctctaggct acgcacaaga agcccgtgct aaggtcaagg 360
 cttgcagaga tgacaaacgt gatgaattca accaagttcg caaaatggct tgccgctgga 420
 gagaagccag ggagaacgcc gaagccctca gagcacaagc caaggagtgc gttgtgaccg 480
 cagccgtgtc gatgaagcca gagtttgctt gaaaggggtt ctccaagctg cccgaagagc 540
 aaagacttg 549

<210> 1309

<211> 445

<212> DNA

<213> Ctenocephalides felis

<400> 1309

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 tttctatgca attagttcat gatctaaca tatcagatga caagaactta gaaaatttgt 180
 ttcttcaatc togtttatta tatttgcaag gcaataacaa atctcatgaa gaacttatta 240
 agttttattag atctccaagc aaagatgcat attttgctaa tggaactagt atattaaaag 300
 gatccaacaa tgaaaatctt gccatattag ctcttaataa cattggagt attgaatttt 360
 ctcttggtca ctttcatcta gcaactcatt cacttcaaca gtcattaagt agagatattc 420
 aactggtaaa aaaaaaaaaa aaaaa 445

<210> 1310

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1310

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ttctagtgat aattgtagaa aagtgtagaa aaatgacacc tgcattatat cctgggatga 120
agaaaacgtta ttttatgtcg atttcttttag atgacaaagg aggtaaccaa atagcatatc 180
ttacaaaatc tgaggacaat aataaggatc gtttagcaag tcggttgaga agcggatcga 240
gaatgattgt ttgaatataa gtcgtacaaa attggaatga aacgatgaac aatatacaga 300
tcttttagaca ggctcaaata atgtatgttt aggagcaact tgaagataat ggagatttat 360
cttcttaata taaaacctct aaaattggga acagtatgtc atatatgcat gaacttgatt 420
gatgtattga tgtataatga actgaagata gaatgaattc aatcagggtta aaaaaaatgt 480
tggcaaaagc gattcgattt agatttgctc ctgatataaa acttccagaa gtcatcatat 540
atgaatatc 549
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<210> 1311

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1311

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gactgaacca caaacaaatt ctaattcatt taccgttgat caaatagaaa ttgacatatt 120
gccactata tatgatatca tacgaagtgt tgaaagagat ccacatgata gcgctggcaa 180
aaccagagaa tcacaagatt gcagtgtgaa ggtatttagac ttacaaaaga agttagaaaa 240
aattcgaagt caagttactc agctacctgg aattgattat aataaagagg aacaacttca 300
atatttagaa acacttagga aacaattaaa acttaagcaa gagcttttgc acaaatacag 360
gactatgtac acatttgatt caatgaaaat ataaattggt taaaatgcct ctgcatctc 420
tcatgaatta tttgctgaat aacgacgttt agttcagaag ttgctgaatc ttatccagtc 480
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agaagctgg 549
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<210> 1312

<211> 423

<212> DNA

<213> Ctenocephalides felis

<400> 1312

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ttttgaatga aacattagta attttgttgt ttaaattgctc acctattaca gtaataactt 180
gtatgtatgt tctaaacctt tttaaaattt agaaatgtaa cgagttatgt ggatatttgt 240
gatctatgct gaatgatact atttagtgga caaaattgca gttctgcatt aaccttttgg 300
tgagaatctt gcaatccaat attgtgtagt tttagtttat aatgtacata taagcaacct 360
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aaa 423
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<210> 1313
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 <213> Ctenocephalides felis

<400> 1313
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 tgaacttaat aacttctgga attataatca tttataaagg tggactcatt tatttgaagc 180
 tctatgtaaa atoctgctct gattagtata actactgcat ttcagaatgg aaaatgggtgc 240
 taagaagctt gatataaaca agtataagct ggatgtgtca gatttagcaa agcaaaacta 300
 ccgacaaata attgaaaata aatatagcag tagtattcca aataaccaag aggtgcaaaa 360
 ctcacaaaat gcgggttcct tgatgtcttt gacaacaata tctatgtcat cttcagacaa 420
 tagttatcaa ttatctcaaa attgcgaaaa agagctagtg caagaaaatt ggatatatac 480
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 ctcgccaca 549

<210> 1314
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1314
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 tgggtggaatc aactgtccag atttcaacga agtctatttt atatgatagt attagttcta 180
 ttttttacac tcttatattt attaccaagt caacataatg gagatggaaa aactatagag 240
 catatacaaaa taacaccaat tgaagcaaat aacttaccat ttttacaaaa tgatcaagt 300
 gtatcaocta ttaattttaaa tcaaaattca gaaactaatg gcttagattt agaaaaatca 360
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 ttaaaaagta gtcttgggac tagtcatggc aaagtttttg tggccaaaaa cagaaagaca 480
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 attaaccat 549

<210> 1315
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1315
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 agtagagtca aatcgatata taatattatt ttacctactt ctctggaata caaatttatt 180
 aataaatatc gatttcagtt acaagctgat cagtagtata ttttctgtgg tcaaggattg 240
 tcatcatgtc aactaaaata atattattat ccgcattgct gttgctaata tcttccactg 300
 ccgtccaggc ccaagtatgc agttgtgtat gcatcacaat atgctgcacc cccgaacagc 360

tttcaaccct cgccctgtccc caagcgagc agcagcagac ggccctgactg tccaaactca 420
 ccctcctaaa aataatgctg atgcttacct cgaatacata caggcacaaa atattttaaa 480
 tcagtactta catcaacagc agtgcgacaa tccaaaaagt naggaacaaa aattcttggc 540
 acagcagca 549

<210> 1316

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1316

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 tggcttgtgg ttgcctatgt cgtttaccta ttccccctgt gcaaaccocg ggttgtggga 180
 atgtgtaaga aaattagtaa aatgctcgga acgataaaaa ttgtgcaagt gaaaaatatg 240
 ttgattaatg tttaattatt actgtgaggt gaaattgata attctgtatg aatttaaaat 300
 taacggattt caatatggaa gtgactgata gtgatacgaa ttccagcaat tataaggaga 360
 cgaataaaaag tgaaccatcc aacacgtctc ctgaagacga tgcaactggc tgcaagatg 420
 aggacgagga tgagctctac cttcaacttc atcttcatgt aaatctgcca actaaagcct 480
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 ccgaatgct 549

<210> 1317

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1317

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 ggccaagatg gacaaccttt gccaaagtgt gaagaattat taaaaatgtt agaaggaatg 180
 gacatgtccg aggaagacaa acagagcctg agggattcct tgcttcaaca ggcaaatagg 240
 gctgcttctc aggacccac gggggctact ggggtcacat tccaacaagt cttgttcatg 300
 ttggccatgg tggcgattat agtatcagtt ttgcattttt ttgcaaataa attatacaaa 360
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 aacaaggaaa agaagaaagt caagtagtca ttttgaaaac gacaagactt ttaaattccat 480
 aattattata cttaccata gttcagtcag tcagatcaaa acagtntgat attaaaaata 540
 ttttccgta 549

<210> 1318

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1318

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ccctgcacca gccgtatgca gcccgggacc agggcacaact tggcatgcaa accaggattc 180
cagttgctca aagaaccaga gttctcgcaa attaatgcg gaaatgatgg gatttgggat 240
aattgtttgt tttcttgca accagaatgt ggaaatccaa caccaattga aactgttttt 300
aattcggacc cacctgtaac gtacttagca ggtcaatata catggtatgc aatgttggtt 360
acccgaaggg aagatttatt caaaggacaa tttctattca gttgtggggg gtcaataatc 420
aactcacgaa tgatagttac aactgcttat gcgctcataa gccagaaatc gattggatga 480
tcagagagtg tgtggatcta gtgtattcgt ttaataaaca gagatnttat gctagcntac 540
gaatagaaa 549

<210> 1319

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1319

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atcattgaag tattgcgaac aaattatcaa cataaaaaagc gaatagaaag agaaactgac 180
gaaagtatca taattgcaaa agaacatgca actaagctgc acgaatcacc agctgttggc 240
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aacggaactt taccaaagat tgaagaaaag tgtgacagcg ttgcagacct taatggatcc 360
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gtattccaga aaagaataaa gacttttatg tggatcagag aaagcagctc ttagatcatg 480
aactgcagtg ggactcatgg aagacaagga tccagcagac gtgatgcaga gcggnccatac 540
gaagaaacg 549

<210> 1320

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1320

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tagtgaaaaa aacatctaag tgaaatcaga aaacaacaac aggaataaca ttttgaatca 180
gtaaaaaataa cggatgacac ttcaagggtg cccagatgaa agggtgacaa ccccggtgcc 240
gccgtctccg ccccgattc cgctgcagac ttatcttttg gaggacgtta gaagggaacg 300
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tgttcaggaa ctagaagagt ctccgagtg cactagaaga agaagagcgg atccgtggag 480
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agaagaaa 549

<210> 1321
 <211> 384
 <212> DNA
 <213> Ctenocephalides felis

<400> 1321
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 gggttcagtgc aggtgaacga tgttatttat ttaataaag ttgcaatgaa tgacgttaaa 180
 ggacttggtg aaagaaacta ctacttataa ttagtgaata ttatttatta ggacgaagta 240
 gttttttattg tctccctaatt ttatctttgc gagtttagtt aattcaaaat atatgatitt 300
 agaattattt gttactttaa aaaacatgaa agaaatctgt atttgaataa aaagatacac 360
 aaacatcaaa aaaaaaaaaa aaaa 384

<210> 1322
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1322
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 ctattaccaa caattctttg gaagaattgt acacaaacac ttctgccaaa acagattcca 180
 ttactctttt atcaaaaacc agtctaccgc ctgatcaaaa tgccacgatt gaaaatcctg 240
 atccagtgtc tcttgaaaag ggtccgctg aacaagaaca acacagctcg atgtctatat 300
 tottctgtgt ttgtgtgtgt gctttaggga ttcttttaatt tcatttcatg ttacaaacag 360
 ggtttccagta tttacctgaa agtattgttg tagttttctt aggtgcttta atcggcttga 420
 taattaattt aatgtcgtct aaaaatattg caaattggag aatgaagaac cttttcaccc 480
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 ttttcaaat 549

<210> 1323
 <211> 29
 <212> DNA
 <213> Ctenocephalides felis

<400> 1323
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<210> 1324
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1324

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agaatatatt atgtacttct gcaaacagtt tcctgggtgc tcctcagctt atattaagta 180
gtaaaatgca gtagatgagg tattgtgacc aaaattttaa aaaaatatat tgcctattta 240
ggcaatatga tatggtaccg gcaaagtgtg ttttagtacct ttcaggtatt tttatataaa 300
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gaatggatac ttttgcggcc ttatgaacaa atgtgggaat tgcaagcaat aatacttcta 480
gagtagaaat tatgctctat ttttgtgngc acatcttaga ctattgagat ctagtagatt 540
gctgaatgag 550

<210> 1325

<211> 491

<212> DNA

<213> Ctenocephalides felis

<400> 1325

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cccattggaa aattttttctg atactatcgt ggcgattaac gtgttaataa ttttatagtc 180
cctagtctcg gttaaaataa aaaaacgtgt ctcatattta ctattcacct atattnacca 240
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gggcatttgt g 491

<210> 1326

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1326

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attagttgaa caatgtgaaa tcatttctag aaattttatg tgatattaat aatattgttg 120
tcgtaatgga ttcagaataa tgtaataaat gatctttatt tgatgagatt attaaaaatg 180
aatattacaa cattcacgca atcaagtaat ttagaatcaa tccaatcagc caattaacaa 240
aatcgacgaa tttttttcaa gttttattaa tcaaaacctt aaaaagttga taacaagaca 300
aatgatacct acgagcaatc aacaagtatg cctagaagag accttcoggt gatcattgat 360
gactatgaat cctttgaaat catcagttat tcttgatgtt ttggatgctc tatttgctct 420
aacactgggt gcgcccgcgt agtcgggtat tggagaggna cgtggaatct aatgggacat 480
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<210> 1327

<211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1327
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 tccgaagcca ggatgctcaa tcaggctagc caggttatga tctcacctga acttcaggag 240
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 gagagacttt tacaagattt tgaaagaagc agaaaaaagt caagtgcgcc acgtgacgat 360
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 ccaaaacgta tccaaaatat gtgactgtta aggatgaagg aagaagtttt gacagcgaat 480
 catcaaactc gtccaattac agatggatca attccaaaaa caagcgcgat ggtgatcgct 540
 gtggtgccat 550

<210> 1328
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1328
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 gcaggccgag aaggagtaga gattaactag tgaaaaaatg atattaagag aacattaaat 120
 aatatcagac agtgattttt tccataaaac aatcgactaa tgatttggtt ttctgaatta 180
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 ttagaatttg taattgagta gacaatcagc aaagctgtgt gattcgataa acattttgaa 540
 tgnaagtaat 550

<210> 1329
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1329
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 tgatatagtt gagtgccctg atttaaccgc aaaaaccatt ttgtctcgct gcaccagggt 180
 tgagtggaaa tcctaattta ctogaactag gtggggctcc ttatctctta ccaattgttc 240
 aaagagaaaa aatatatgat ataaaaaaca ttgctaagtc tttggacttg agtccggttt 300
 tagctatagg agctggtgca ggaccatggc catatgctgg tgtatgttgt gaggggtattt 360
 tcaatatgca cctagcatct gacggtacct tgaacaacaa aacacacata gctactgtta 420

acatggaaaa tagtgcacgc gtacttggaa cgggtccaaat gatgaacacg ttgtgcatta 480
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 atggnctaaa 550

<210> 1330

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1330

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 cgatcccacc ttaagccaaa tcttcaccaa tcttcttnga acatcaattc ctctngcga 480
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 gntctttcta 550

<210> 1331

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1331

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 tgactgnatc tggctttgnt acnattgagt gcnaataatt gatgacacat cgttttgata 180
 aataagaaga tcaaagtatg ncatacaata ttttctctag tatccggggtt ggaaacaatt 240
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 gaaattactt gatattgaca tcatgctcaa attttatttc agcattttca tttgcatcat 420
 gnaatcgtae ttttattacg tattcaaatt taccggtcat ccgtagacca tagtctacga 480
 tagtgatgnc agaagctgct tacactgnon atagtttctg aaaaagcgat aaatctntaa 540
 atnccgattaa 550

<210> 1332

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1332

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 caagagtcaa aaggaatgac tttgaagggtg cgtcattgaa aacaaaatgc ctggtgcatt 420
 tctacatatc cctaatacct attagaacct aattaaaant aaattaaatc tcagcatcta 480
 gatcaaatat gagnaconggtg atttcttgta tacagggtcc tcattattac atacattcct 540
 ccatactcat 550

<210> 1333

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1333

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 ggcgtctgaa gaggaacttt gatagctatt cctcatatcg tcgtttcctc attgttttaa 180
 tactgtttat tctaattgctt ttatataatgg caccttcagc cttcagatgg ttgctatcga 240
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 atataaatat aaaattgggt agatcactaa atcttcctat attttatcac ccattgggtta 480
 tgcattctgct gcaatggaaa tagcttcgaa gctncgttgt tgaatataaa aaaggatcat 540
 tcacaaatcc 550

<210> 1334

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1334

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 ttaattaaag tttggctaaa ttttattttg ttaaataaaa gtatgctctt tattttttat 180
 gtgtagttat ctgtattata caatgagggg agaattattaa catttctagt aaaaaaagt 240
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 ctttcccttt ctgtcaatta taaatctcgt gacaaaccca taatagagga agctattgaa 360
 acaaatcaag taaaatgtca gttgtcgaag agtttaatat ggggatgctt gaatgcagcc 420
 attctcgcta taattggttt gatttaattg acgatgcttt atccgtggca gtgaccacag 480
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<210> 1335

<211> 466
 <212> DNA
 <213> Ctenocephalides felis

<400> 1335
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 aacatgtttt taaggccagt ggagaaccag ataaaaaaga tgactagatt aataatccca 180
 ttcattttta ttttagattt tttggaattt tttgattcat ttattctcac atatgtttta 240
 attttgttta attattatta caaagtacat attcaaacat atttaactgt taaaccatac 300
 taatattgct tgtttcctaa attatttaca ttaaattttaa tatatactct atgctaattg 360
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 ttatataata aaatttaatc caaaaaaaaa aaaaaaaaaa aaaaaa 466

<210> 1336
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1336
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 gaagtgttga aacatgcaaa acgcttgggg tttggggaag atgatgtatc agccttgtat 180
 ttcagagcac gtttttaaat ataaatttat atatggtttt ataatatata aaattttaga 240
 ctaatttata tatttccaca acagaagcat ataatttaga aatttatttg tttataatta 300
 ttgactaagc taaaattttg tacttttggg aaattatttc tattaggaga atgtagtta 360
 gttcacgtgt tggataattt gtgtttttaa tgttttacat gtaggtgcaa tgacatgtat 420
 tgaagaatag taatttaaat ttctgtcata attttacaat aagtaaattg tagttattga 480
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<210> 1337
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1337
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 ggtgcttcog gattgataaa ggacaattct ctgaaagttt tagctctctt aatgggaccg 180
 gccgtggtcc cgtggtaaga acgtgggcta gcaaatccta gtcccggtt cgaatccaac 240
 ctcggtcggt tcggtatcaa aacagcttga taccaaattt tcaactgaaa tcatagattt 300
 caaatatgat ttcaagtga aatggccttt cgtgggcaaa gctgtagtgg caacacgcca 360
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 gtatctctat acaacagaaa aatgtaaaag ctctgacatc gtgcaccatg attgagtga 480
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550

<211> 549

<212> DNA

<213> Ctenocephalides felis

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tcaaattcaa	gaacatttta	gtaataaatt	aaactaataa	aaaagttgct	aatatctact	180
tcggtttttac	tgcaattttct	tggatgctac	aaaatgaatt	ctaaaatatt	gtgtttcatt	240
atatttttcca	cctttttttct	ggctaaaagt	caacaaataa	attactacgg	caactcaaga	300
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attaattgtg	aaccagtata	tgccacagtt	gattttctcat	acttaagatt	catgctggat	420
aaacttggtt	caaagtagtt	cctaaggata	tctgtaatcc	tcaaaacttc	ggncaattgt	480
gcaagcttcc	anaggcggtt	tgattcagga	agtgctaattg	tagtgaagac	gacagatagg	540
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<211> 413

<212> DNA

<213> Ctenocephalides felis

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tcattggtga	tatattgttt	tccaggcatt	aataactatt	tgattaaata	aataattaga	180
aatgttatga	attgtaattt	gctctttact	attattattt	gtaaatttgt	gatgcattta	240
aaaatttaaa	aatattcatt	tgttgaataa	tatttgaaat	gtttttatgtt	ggaccattgc	300
aaagtgagca	aactcaaaaa	tgtattaatt	tttttttttt	gtatatgtac	tgccaataga	360
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<211> 549

<212> DNA

<213> Ctenocephalides felis

attatttttaa	gatgatatga	tgctataatg	gtggaatcca	aaattaatat	ttggaatgat	60
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t t a a t c a a t g	a a g c a t a t t t	a a t t t t a a c a	a t t c a t t t t g	c c a a a t a t g a	c t t t t a a t t a	180
a a a t t t a t a t	g a t t a a t a t t	a t t t t a a a a a	t c a a t a c a a t	t t c a a c t g c t	t a t t c a g a t t	240
t a c a t g c a a t	a t g t t t c a t t	t a a t t t t a t t	t a a t a t a t t a	a t a g t c c a g t	t g a a t c a a t g	300
g g a a g g c a a a	t a c t a c a t c a	t g t a a t t g t t	g a a t a c t c t c	c t a t g t a c t t	t t a g a a t g a t	360

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tcaaaacagt catgaacctc atattatgcg aaaaactgcc aaaaggtttt ttttaagttgt 480
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tccaaaatt 549

<210> 1341

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1341

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ctaaatctct tgaaaatgca attatcgaag cgaaaaggcg ctttgaagaa caaagtgcct 180
tgacgtcaga gttaggacca gcaatatttg acaccogtga tgctgctcca tttgctctac 240
caagagcata tgtaacaggt ccatgtttta gctctgacga aagttcaa acatgtagaa 300
cttctgaatc agcagttggt gctgtcagtc accatacacc gaatgcatta acatcatttt 360
taa atgacgtg ttattatatg ggtcacaaaa aatcaaggaa atgttatagt attcaatcat 420
tttcaattcg atgactttga aaatcgcgat ggacacatga agatgtagaa gaattgaaaa 480
tcttttgga taaggtagga tcaagngaag ttatgatgac ttacagggtc caatactgna 540
gtgtcatng 549

<210> 1342

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1342

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acttctgcat tttaaaatta tcttaatcca acatcgaggt cgcaatctat tttgtcgata 180
tggtctctta aaaataatta cgctgttatc ccttaagtaa cttaatcttt taatcataat 240
ttatggatca attattcaat tatttatggt ttaataaaaa aaaagtttta taaattttcc 300
tatcacccca ataaaatata ttaatatata taaattttaat aatattctta aaattaatct 360
atatttatat ataaaacttt aaagggtctt ctgcgcttta ataatttta cgctttttta 420
cataaaaatt aaattctata caattttatt aagacagtaa tatttcattc aatcattcat 480
tccagctttc aattaaaaaa ctatgnttat gctcctttga cagcaaatac tgcggctttt 540
aatctcatg 549

<210> 1343

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1343

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aatgatgtgt ttgatcaatt aaattaaaaat tcttgggcct ttgcagatta ttagcctatg 120
aaaaataact tttgatagtg acgtatactg cacaaataac tctaaatttc ttgtaaatat 180
tcttgacaag atggaaatgg aaacagatgc taaaaaggac aataaaaaaca tggctcatgt 240
tatgctaaat gaagtcactg atatgctaga agatgatttg cagccgatcg aacaatatga 300
ttacattgcc ttagatgaat tgcaaccaat ggaacaaggt cttgaacaat atcaagaaac 360
aatggaaagt gaagaaaatc aaagtgaaga acagttgcaa cagcaggaac ctgaagttga 420
agaagtttag tgccagaaat agaggaaaaa ccaattttgt caaactgtcc tctgtagaac 480
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ggcctatcc 549

<210> 1344

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1344

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agtaaatcaa ttatatagag atttaggcac aagagtacaa tccaggtatc atattgaagt 180
caaacaaaaca aatggtgttc tggaaaaagt aaatgaaata tatgatcaat attgtttaca 240
aataagtga acttataaaa aactgcaaga tattaattat ttatctgaag agctggattc 300
attagataag ttaagtgtt ttaacacaag gcagaaatgg caactgctgg ttcacacaaga 360
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tggaaaattt tgtacaatat attgatgcgt gatttataaaa tagatgtaaa ttctatgaag 480
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aaagaagag 549

<210> 1345

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1345

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gcntttgaaa tagactactg caatcctcaa tcaagcaatc aacattcgaa gncaactaaa 120
gataataaca atgacggtag tactgntcca gacgaagatt ttttttcgct cattatgaaa 180
atacaaagtg gaaggatgga tgaccagcga gcaagtataa atataaaacg agtaatatag 240
aactctactt taataattgt aataatattg tatatggatt attagattac ttttaataact 300
agaatatttc caatttttta atatcatttt ttgtggatta catacataga atagtctggc 360
tatcgattgg tactttgact atgaattgtt gtacotttga accgcaacaa tttctaatat 420
aaaatgagta gaaggtttat tagcgacata atagtgacat tgctataata tagcatttta 480
atcaaacaaa ttaaaaatgt gatttitatta ataggtacta tcataaagtc acaaaagccc 540
ttccggtac 549

Variable	Mean	SD	Min	Max
Age	37.2	12.5	18	65
Gender	0.5	0.5	0	1
Marital status	0.7	0.5	0	1
Education	12.5	2.5	9	16
Income	15.5	10.5	5	45
Health status	1.5	1.0	1	3
Stress level	2.5	1.5	1	5
Life satisfaction	3.5	1.0	1	5
Work satisfaction	3.0	1.0	1	5
Family satisfaction	3.5	1.0	1	5
Community satisfaction	3.0	1.0	1	5
Overall satisfaction	3.2	1.0	1	5

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<210> 1347
<211> 549
<212> DNA
<213> Ctenocephalides felis
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<210> 1348
<211> 377
<212> DNA
<213> Ctenocephalides felis
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493

<210> 1349

<211> 349

<212> DNA

<213> Ctenocephalides felis

<400> 1349

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tcacaaagtc gtccccagtg gtcagaactc ttttgcaaca gaccaggaac ttcaatgatg 120
cttatccagt agtatcaggg cccccaagga ctaagatttc tactgctgag aaaattgtcc 180
atggagccgt catcacagtc ggttgcttgg ccatccccgc ttgggtgctc ctccatttgc 240
aagaatacaa aggagaacaa taaacaatga aaattcttag taaatgtgtg ataagtgtaa 300
atttaactaa atacaaagga ataaagttaa aaaaaaaaaa aaaaaaaaaa 349

<210> 1350

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1350

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tggacatttt attctggatt tccttgatgg tgtacctata aaattttcct tagtactgat 180
tggggaactg ggaatgggag gcgtgtgaat ttgaacttta gtagaggaag tacaaggatg 240
tggcgataaa cttacgtggg aatgtttgtg aagacgatct gatatggaag gagcagaggt 300
aaaagatgag caagcagaaa gtggatatct tagtttctct tttgttgatg gtgtacctgt 360
aaaattttcc ttagtactga ttggggaact ggggaatggga ggcgtgtgaa tttgaacttt 420
agtagaggaa gtcaaggatg tggcgataaa cttacgtggg aatgttgtga agacgatctg 480
tatggaagga gcagagtaaa agatagcagc agaagtggat atctagttct ctttgtgtgn 540
gtcctgtaa 549

<210> 1351

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1351

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agactgccaa agtattttggt gatgaacagt cagattcttt aaatttttaa tcattgcttt 120
ctagctgtcc tgaatttgca tctaaaccca agctgcaaa caagcagtac tcacaaaaag 180
tatttaaaca agtttagatgc aaatctaaaa ccttagaaaa tcaattagaa gttcatcgta 240
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aaccatgtga tataacaatt gatgaattag catcatattt tgagactttt gttcacatac 360
ccaaaaagat gtcttcgatg gcagaaatga tgtatatatta atgatatttt tttcatattt 420

gtaaattgtt acttataagt tctctatatt tatgtaaatg aattagtgtg atattgataa 480
 agtccattag ttcattgttt gatacatata aatcaaatag atatacatca tctaagctta 540
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<210> 1352

<211> 363

<212> DNA

<213> Ctenocephalides felis

<400> 1352

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 gttcacgacc acgaaaaact ccgaggaggc ctttacatag tgcaggagct gcccgacta 180
 acaaatggca aaaaagataa accaacagtc cgaaaaatgg caaaagaaat gtctcaacag 240
 atctatgaaa aatacgacaa ctgcactaga aaataaaaaga caaacacact ttgttaaaat 300
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 aaa 363

<210> 1353

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1353

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 gtcaggccca tgtcgatgga tgctacgccg atcaacgcgc acacgatgca ctggttcgcc 180
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 gaacgccagc gtcggctcga ggagctgagg cccaacgctt gccggcagag gttagggaa 480
 agaagaggaa gagaggagga aacggatcga ggagatcngc tgaggatatg acagcgctct 540
 agtcgaaga 549

<210> 1354

<211> 384

<212> DNA

<213> Ctenocephalides felis

<400> 1354

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 aaaattaaac gatatgctta attagtctag aacctaaaa atatcataaa caactttaat 120
 ataaattaat gtaatcacat cattatgctt tatagtaaatt attttaaatg ttataaatta 180
 tatattttga aaacatagtt attctatgca aattacgcaa atatgaacaa atttttatca 240

acataatatt atttatgata taatagtaat gtccgaattt aaaatatacg ttctcgtatg 300
 aaaatattat acaaatacaa caatgcctat tcgaagcgaa atatctaatt aagaaattta 360
 tttaaattat aaaactgcc aaaa 384

<210> 1355

<211> 288

<212> DNA

<213> Ctenocephalides felis

<400> 1355

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 atacatttga agaactgaag aagagactac attcttggca gcaacaaaca aatgatccct 180
 ggcgttgtgc tccacattct gtgcttatgg acactcctgg tataactgca gaatgtttgc 240
 cactatataa ttgaaattgg aacaaagctt aaaaaaaaa aaaaaaaa 288

<210> 1356

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1356

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 tgtaattgct actgaaaatg attaatctcc acttcaattt caatttttac gtgattcggg 180
 agaggaatag ttacagtata aatataatca atggatttca agatatgaat ttagaaaaaa 240
 aatgttttaa ccagccccta gctctcctac cataaattta tttctaatat ataaagatgt 300
 atcagattaa caactcagtc tttccataat tcttccaaga tattataaca gcatgttgcc 360
 atgtctgatt tttttttcat taaaatattt aaaaaattag ttatctacgc gtgctccatg 420
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<210> 1357

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1357

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 aatattccag tgtaaatgaa gattactatt agttttttatt ttgttttaatt gtgtatcaca 360

aaaaaacgag tttatggatc ttaagtctta ttaattgctg aactaaatga atgagatgcc 420
ctcctgggtgc atctcagtga atgtgaagat gatgaactta aataatgacg cttgcttagg 480
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aacaagtaa 549

<210> 1358

<211> 497

<212> DNA

<213> Ctenocephalides felis

<400> 1358

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gtcgttaatg ggacatttaa cagatagcca gtaactgtca aatagtttat ttattaaatt 120
gacatttttt aattattgta tttttaaaaca tgttataaag cacataacct atatgttata 180
gtatttttta tcgcggttaca tttacaatta tgtatactac aaaaatagag aaaaacatgt 240
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ttgctcttga acctacagaa gaggaattct cgagacgtac aagttcccgg tcaaacaacc 360
aaataagtac tattccacaa aacgaaagca atatgatgat tttagaaatg ttagccaaaa 420
tgagtcatga aataaagcaa atatctcaag aacaaaaaga actttccaaa cttctgaaaa 480
aagaaaagac aaaaaaa 497

<210> 1359

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1359

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ggtgaatctt gttttgcatc tccatccatc aggtagctta ttatagatct tggcaccocaa 180
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tccataactt tagaagtggg gcactatata cccaagctaa tattccgagg acgagtcact 480
attaagaac gtgactccaa cgcaaaggcg aaaaccgntt naggcattggc ccctccggac 540
catccccta 549

<210> 1360

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1360

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taacottgtg gacttgatat atatgcgtca aatgtnccg ataactctgtg anggtagact 540
ctgtttctt 549

<210> 1361

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1361

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gatctcacat aagatcatca agaagatatg actgtgacga acgcgcctct aaacgacgaa 180
aggattcatt ttatgaatct ttatatctc atagaactat actagtagtt gaaaacaaag 240
aagagcctac atgcaaagtt tcaagatgcc gatggtctgg atttgatgat gaattattat 300
cgcattgtat acacaaacac aacgttttct aatcaaata acaaaatata gtcgagtttc 360
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tgtggttatt catggaaaat gacggtctaa tattaatgta gtgncagaac gcagctgcga 480
tgtcacgagc tgtggattag gtcaatgtag ctangtcaaa agatgtcaag aatgccagaa 540
tctgtaaat 549

<210> 1362

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1362

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tgtatatgga tgtgtgattg tgtaggtat tgcattggta aattttgttt ttaaataatct 180
tcaaaacagt ttgtggtaaa atatttaatt taggaaatat tggtatatca tgaatatgcc 240
aactgaagta aatcaaataa aaaggcactt tgtttagata tttaaatatt taaaatgttt 300
gttaaataata tatatttggt atttaaatgg cctgcaatat tactgatatt gcctgttcaa 360
atctctaaat tctagtaata tatgtcacca ttcattgtga tttattcaac gattgtttta 420
tgaagctctt tacagcttcg cttatagtta aaatatattg cctaacatta ttaatgatat 480
tatcacatta gaaatctgtg aaaatattgc tgntaaaatg tatgtgagtt taaattgcaa 540
tatccactc 549

<210> 1363

<211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1363
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 taaaaataaac aatgttggtta gagttaaata tttatacgcc acatagggtt taaataaata 180
 aataattatt ttaaaaaata atttatataa attactttga acaaaatcta gcaataagta 240
 aaaatgggtt cgcgtattaa acaatactat gcagcttttg tagccaacat cgccacaatc 300
 tgctacggca ccacaatagg ctgggtcaagt ccagccctgt cagccctttc aacatcgaac 360
 ccttcaccag gcaaagacat catcttccaa ttaaccgacg aagaggcctc ctggataggc 420
 ggtttgattt gcataggagc cctttttgga ggcctttgtc cgcttggttg gcaggagtca 480
 ggggcagaaa gttgtggata tatgacgtcg nccatcataa tcagtggctt tgctctgttg 540
 cgaattgtc 549

<210> 1364
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1364
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 aattatacga tgaagaaagt agcagccgat catggaaagt toctaaatag gatcaccaaa 180
 acgctttatt atggaaaact accgaatact gatcgtttta gtatacccat gtcagaattg 240
 gcagtggaga tgttctccga agcccatcgt ggccacactc tgcaaagact acaaatgaac 300
 tcggcttgca acatatctcg aaatgcctgt gtcaacccct gcgctctcgt attggctatg 360
 ttatatgttg acagactacg tgattgcaac cctgaatatg tgcgacaagt agccccagt 420
 gaactatttc ttgatctttg atgggtctcta gaagtttttg catgacgatg gagctgaaga 480
 tgaagtattt ttacacgaat ggctgctcag ggggtattca gtacagctta aacactagaa 540
 aaagattct 549

<210> 1365
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1365
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 aagataataa gtatagagtt tcgtgattaa atataatagt ttttatattt ttatataata 180
 attttatcga gataaaaatt gataaagggt ttttcttttg atcttaaata ctatgaatac 240
 ctaatacaag ttatgtatta tatatttacc attgaggtaa attttaagca gttttgtcat 300
 ttataatatg ttgaagttga ttttaacaaa aattaatcgt ccttatgtaa aacaatatat 360
 aaaatatttc tctagaacca acctcaatga tttttacagg tatataacaa aataaatata 420

aatacaaaat ttatattaag ttgtaacatc aacatatact tatattaata tctgaaaaat 480
 tatatatcca taattattac cctatctaca tattatatcc tgtctataac ttcattcaat 540
 ccatattgg 549

<210> 1366

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1366

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 aataaaaaaa acatcgatcat acatttatat acttagctaa ttactgtaaa attgtaagaa 180
 ttcattttat accttaatga ttaaccatat tccaattaaa acacttagaa gacattaaaa 240
 aaatcaaaag cactaaaaac tggtatggaa aatcgaaata tatgtctttg ctcttcagag 300
 caccgggttaa acaacaatca attcattttt ttttaaagat tattcatata ttttgggtgt 360
 caatgatctt attagttaa atatttttgc atctgtagaa ttaactgcag tagtattttg 420
 caatgcattt tcaaagttaa taatgcgttt tgaattggaa atgattgnca ttaagggtgna 480
 ggtgaatctt catgtataat attaaataag tatctaaatg ttttttgggt tattatcaat 540
 agttttggn 549

<210> 1367

<211> 371

<212> DNA

<213> Ctenocephalides felis

<400> 1367

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 ttaatatgaa atcattccta tttttatatt gatattttta ttatgaataa gttcataatg 180
 gaagtaccaa ttgtttaaga atgctatgcc atcattcgcc taatattagt aatatatgaa 240
 atcaaattta attatgacaa ataatatata atgttttagca tgcatatatt atttaaagta 300
 ttttgtatat tattattaca aattaaaaat agcttatcaa ataaaatata tataaaaaaa 360
 aaaaaaaaaa a 371

<210> 1368

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1368

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 gtcotgaatt tgattttttt atttggcgtg tccatgagtg attaattcta ttaaattagt 120
 ttgtgtatac ataatatgtg tttgtaatgt acattggatt ctgattttta cacgtgcttg 180
 aaccagtatc atccgagatg ttgacaataa ccagtactta gaattatcag tgccattaaa 240

gattcgtttg tgcagaaata gacggaaaaa gtaattttaa tattgttagt gatttttttg 300
 taacttattt gacaatgaag agcacaattg gagggttg tgacattcaa gttgtggaac 360
 ctaaattctt ttcttaccg gtaccacaag aacctttaag ggagcctta ccatcagaca 420
 atggttcgtt ttatagtcgg caaggtccca aagtgaggcg ctcacggatt gccgaagacc 480
 ctgtggatat acagtcaaag acatcaagat gccgctcgct ggggttcagga aagggataaa 540
 gaaattttac 549

<210> 1369

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1369

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 ttattaaagt gtcggataac aaaatcacag gacgaagcaa gatgaatttg tgcggtgccac 180
 tcttaaattt attgatcctg gcgctggtt tgatagcgca atgtcatgct tcgaaaattc 240
 cggagggaat gcctttaatt cttccaaaag atgccacacc ttcaccctta ttgagagatc 300
 caccacacc acccctgctt ctcccaaggg atgcgactac tccaccaccg ccaccactgg 360
 tctttccaga agatgtcaaa aactacaaca tcgtaccaaa taatgcaacg atcttggcaa 420
 ctttgacgca taaagacgat accaatcagg aaagcgctga ggataataat caagaaagcg 480
 atgatttaaa taagacgccc ggtcagaggn cctgcaagga agtgatatagc acagaagtac 540
 agagaggtt 549

<210> 1370

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1370

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 cggtgctcgc caaaatccac cagctggtac cgaaggatgc attccattca ccgtgccacc 120
 cggcggaataa attccggtga gcgctatctc cgcagctctg gctgccact cgtctcatcc 180
 acttaattga ggtatggcac cacctaagga ccaagcacc tctaccccg gatatgcacc 240
 agtttcagca ccaacatgca ccaatctgtg tgttcaagt tctccttcgg ccgtcaatga 300
 tactaaccag cctaaccagg ttacatacga atccaacct ctagtacaga ttgctcccaa 360
 cgatcccaca tataactatg acgaaaactt agagaaacaa cggaaattga attcaccaaa 420
 aagttcactt gtgaactatg tgaaaattac tccgtataat aacaaccatg aaactagaaa 480
 ttcacctacc tcgattgagc acacacatct ctaaatacaga aactaatcat cccgaatgga 540
 ctgtattaa 549

<210> 1371

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1371

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aaagtaaatgt cgattttaact cgggtcgtat aacacgttgg gtatgacggt ggcagagaca 120
gaaattgtgc aatcagaaaag ataattcggg agaaaaaata tatttatata tagatttgaa 180
actgtcctga ctacgaaatg taacaaatat tatgatttac aagtatagaa acatggagtg 240
cctagcttca ccaagaaatc taagattcaa aataacttta tggacaaccc tatatgtagc 300
agaagtgatt atgtgcaagg agaagaaaac tgtgactaaa aatattgtaa acatttagta 360
ttaacaattg atattttctat tgcaacttta ttggtaaaaa accaaaattt tcactactat 420
taatttacat taatagctac taaataattc aatcactcta aagaatgact gttttcgatc 480
ctactccatt catctataaa ctggtctata tgcaaagtat gagacaaaga agtttactgt 540
ccggtgtcgg                                     550
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<210> 1372

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1372

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ttgtgtgttt tattaaatca agtatctatg tcaaaaatgg tcaactgaaa gtgtaaatcg 120
ggaggaaata atccaagtac aaaagagggtg tcaataccat ctgggaagct tactattgaa 180
gatttttgtg ttggaaatca tcaaagttgc aaaatathtt gcaaaaagtc atgtggattt 240
ggagggtggtg cttgtggaaa cgggtggttca acacgaccaa atcaaaaaca ctgttattgc 300
gaataacat attccggatg aaagaccaa ttgatataaa ttactaaaat tatgctagat 360
agcaatcata aaattttgaa gttttcaatg atcctaacat gttttgcctc aattttattt 420
aacagcaaat tgtggaaacta cgtccgtac aaatgtcaag aaatctgatg ttacaataga 480
tattataata tgtacattgc tatattatag aatatatact gattgcaagt tgaaaaaaaa 540
aaaaaactgn                                     550
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<210> 1373

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1373

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tgcaattaat ttgggtgaca ataatgagac ttattatatt tatatcgtgc ttggcatcaa 120
gtacggttta aatgtacctg tagtcaaagg cataataaaa acgctagtggt aatttgcacc 180
aagtgttatt gtataaaact gcaatatgat caatataaaa agtatatgtc cttatttttt 240
tgtttatatt ttactttcat cttatataaa cactatttta tgtatccggg taccaatgag 300
gogctgtgca aagttatata actcaataag tctcaagcc tcggcagagt acgatgagaa 360
tggggatata tcaaaagatc tggtcgaaaa tctcttacac aggtgtagaa caatgcacaa 420
gtaattttgt actcttgtgn cggaaaatga aaoggtctct catgtatggg canggtgtgg 480
ggaactcaaa taaanaantn gnttcccaa naatgnttac atgncctttt ntaagcnttt 540
atccaagatt                                     550
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<210> 1374
<211> 550
<212> DNA
<213> Ctenocephalides felis
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[illegible]

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tgacttttgg	ttaaaaatat	aacgtaattg	agttaccagt	atgttatatg	aagaaaccag	120
ttttttctca	ggttagtaag	ttatatctct	gtttgttttg	ttaatcaatc	aaacaacttt	180
gttttactga	tagttctcta	aaactgatta	ataataagcc	tccccagtg	gttgatgtct	240
tcatagtaat	aaagtgtctc	taatactcca	agttttatct	acaaaactag	ttttttttgt	300
aaattgtgca	aataataaat	gttactgttc	aaaaaaaaaa	aaaaaaaaaa		348

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<400> 1376
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taaaagttat gtatttttaa cattatatatt atagatatat aattgtaaat aaaaataaat 120
tctgacacta ataaaaaaaa aaaaaaaaaa aaaaaa 155
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<213> Ctenocephalides felis

<400> 1377

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tgcgttttgt aacgggatct gtgatacttc atacacacat atgtatgaat gatagaaaat 120
aacattttcca acgttcaagt agatactgta tgtagtttag tgtttgtgac ggaattcctg 180
cagatcggaa attactaata attacctgta cagttggaca ttttcaatca aaaaatgtac 240
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cacattgtga acctgtacag ttctgggtgc tgccagacat ggtctagctg caactgccaa 480
gaaatagcag gatgccacat ttggaagttt ggagatgaga tatcgaaatt atcaagacag 540
aaatctggct 550

<210> 1378

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1378

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ttgataagtt aatatttgat tttattatta tttaaatgtg tggcaaatg attagaataa 120
tttattcaaa cctgttcgaa aattctgccg aagtaagatg cctacgtatt cgtcatcatt 180
ccgtcatctt tgctctcatt tgctgtgcaa acaaatttg tgaaagcaga aatgaaatga 240
agtaaggtgt tctggcgcgg ttgttgttta tgttagtttt gaacaaatat taagcgaagt 300
gaaatatcac tgttgatgaa tatcagtcac gttttgatat atagttaatt aataatgatt 360
tactttgata tcaagatatt gatatttaat taatgacact tttattttgc gtgcacgttc 420
tatgtttcaa agtttataca cattttgatt tgcttgatta ttgataaatc atgacgaaaa 480
gaatcggcgg cacttacgtn gacgggcata ctagcaaggg caggaaatca tggaaactgt 540
taggtccttc 550

<210> 1379

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1379

ganntttcta aacaagatgc ctncaaacct gatggagctg aagcgaaacc ggatctagag 60
gagaaatact gtgaaataaa acttgcacaa ccagaaattc caacttcac tcagaccagc 120
gaactagggtc cagcagtgtg tgtggaaaag actccagaaa tcggggccagc cgtgttggtc 180
aagaagggtg aggctgaaac agagaaaact ctcgagttgg gtcctggtac aatctcgacg 240
gttgccattt gtcctaattt aacagtcgct gaaatttaca atgcccctt attagcagcg 300
agcgaaccag caaaaccaa tgttcaagct gatgtcgctc cagtcgattc caacaagcca 360
tcgactcaac cgacagaact tgtagccgag gaagctaaac ctgcagcgag cgaaccagca 420
aaaccaagtg ttcaagctga tgtoctcca gccgattcca acaagccatc gactcaacca 480
acagaagttg tacggcgga gccaacctg tgcacaccta agaggttcta aacaccagt 540

tatcgaggca

550

<210> 1380

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1380

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tttaaaagcc ataaaagtgc tccgttcgag tgtcggacat gtttttgaga ctttgtcaga 180
aggtttaaga actgaacatg gacaagatac taaagacaca aagtttttga ttgaattaca 240
agaattgctg agtgctgtta atgttaactt gagagaggta gagacttcag tgaatagttt 300
aaatgcgccc cccgggccat tcaatttagc aaacactact tatttaagtc aagagactac 360
acaggagaga caggctttgt ctgcagcgtt gtaatagtat agtggccgat aagattcatg 420
agtcnaggnc ctacacagct ttttaagtca aatgctttga aaggcatnnt taatcaagca 480
tgcgaaaggc ggnggaccca actttcttta catgtgcnc cgaaacngg ttctttatac 540
aagttttcag 550

<210> 1381

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1381

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aatgaaaaaa gttacaaata attctaattg aactcgaaat attgtgtcta ccatatggaa 180
atcaattgca tattgtagtt attcagcagt tcaatgcatt tttgaaatga catttcgtga 240
aaatttagta ttagtagtat ttcccagtga gtgtctataa aactaaatag ttcgaatatt 300
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tatacctcca gatgcaaata ttggtcctta tggtaatcct cttatcctta ttattoctat 420
gtaaatatgt aaaaattggt tataaggaag natgtttatt atccaagttt agatattatc 480
atacctatta tattagactg tttgtggcat gctttganaa ataataatat ggattatcta 540
ttaatctgtc 550

<210> 1382

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1382

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aaaaatatat attttaaaat ataccatgat tatttagtag ctggagagtt tgaggtaaat 120
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009936-1101

tgttgatata tttgaattca aaacaaactt gcaattctcg attgcacatt aaattctgtt 240
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 tgcgtctgag aatataccgc gcgaattcta agttgtttac tctaatttat ataaattata 360
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 ttaaaggcag cgtactcaat ataattataa taaacaaaac aaatttatct caatacaacc 480
 cgtaacgaaa cttttatgtg gatttggata attctttggg atatcggaaa ttaaaattcg 540
 atagatattt 550

<210> 1383

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1383

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 cgagaaaata atttagaaat catgggggtcc attaaacaac ctggcagggt tatgaatata 180
 caacaaaatg cacagaggac aacaaaagct caaggtgggt ttccacaaag cttatctgga 240
 agtgagactg atgtgtccac atccaatgag aatttatcac atgaagagcg atatgttata 300
 cgtcacactg cacgtgttga accacaaggt caagagacct tgcaaaaccc atcgccaagt 360
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 ttggaatcca acatccgaga ccattgatat gagtagaaaa atggaagtat taccagtcca 480
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 atcgagaatn 550

<210> 1384

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1384

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 gttctctttt cattattttg gttattgtca taacaacata agaataaacc ttttacttaa 180
 ttgaacagga atggaaagta tgaaaccgtg gttttaataa aagtaagatt ataatttaata 240
 gattagaacc acttttgatt aaatatcagt aaatgtaaaa gcctcgtata aaacgatgat 300
 atgataacag ataaggccaa tatagtgtt aaagtcaatc ttagacagat gaaaagttaa 360
 attaatgtt tattctaaaa ttaaaattat tattcaatac tatttaaata aatagatact 420
 cataatacaa atattaaaca taaaataatt cttgtaatac tgagtataat gaatacttaa 480
 tataaatggg ttattaataa ctaatatcat tatataatta tatataattg gattcgagtg 540
 aaacncatac 550

<210> 1385

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1385

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tagcagtccc gagcagctaa tcgagtgaca tttaaaaggg cgcaaacgtt acatcggagc 180
atgaatagca aggtggaccc ttigccagac gagcacctga ttattctgaa taaattatcc 240
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tgaatcaaca gccctcatcg cctttaatgc atcaaaacaat tcaattatcc acttatgaat 360
caccagccct catcaccttt aatgaatcaa acaattcaat tatccacttc tgaatcaaca 420
gcctcatcgc tttaatgcat caaacagtaa gacttatcaa ctatctatca ggcaattcaa 480
ttatccactt atgaatcaca gcctcatcac cttatgatca acaatcaata tcactataat 540
cacagcccta 550

<210> 1386

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1386

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gcatattagg ttatatattc tacaaaagaa gaagaaacgg gtgcgactac agggcccgag 120
ctacacattg atatagaatc aaaaaaaaaat attcagaaga aaaatataat ttcatacagt 180
atagtaaatg tataagtagt taattgtagt aatatgtttg tttatggaac ttgcatttat 240
agatttttta aattgaaaat cgtttaaaat caataataag gctaattgtac ttgcttacca 300
aaataaaaaat atcagtaagt attataaaaat ttgatttaac aatttggaca aattgcttaa 360
aaataaaagt cttcgaatat ttttggctct tattttcatt tatttcattt tattttttgg 420
tactaataan gctggtatct ctaagtttat ttcttatcca gagattttta attaaatttt 480
taanccaaaa ttatgaatgg ttttaatcnc taaaataaaa accaaaattt atggtagaat 540
aaattttttt 550

<210> 1387

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1387

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aatagttggt ctgatgcctg tgctgattta acactnnagg ctttcgagag gnccatnaaa 180
atatatacag ttgcatatac agncggacta ttgatgcgag gcaaagtacc aaataaatcg 240
gacttaagaa agacttttct ggggattcta caatctgcag catttttaac gacaaatggt 300
tttacattcc ctatgttttt atgttttctc agaaaagttt gtggcnatta caatatattg 360
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ctagacgaaa tttattatgt ttatatgtat caaatgaagc aacaganact gttggaatat 480
gttgaagtct aggggatatg tccgtctata aaatatggag aagtgggaat cnnttcatga 540

gcatcgtatt

550

<210> 1388

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1388

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acaaaacaca attatatttg tatgtgaatt atctctgctt agttaataat taaatttagg 180
tatagacacc actaggtata aaaaaagctc aagatttttg tttctagtac attttacttc 240
aattttctcat atttgctcca ttccataaa tcgtatgtct tcaacgtaaa atttcatcag 300
atgcgaaaca ttttcaacaa gaacaaaagt tactattcag tttctcggtc ttaatttaat 360
aagccatttt ctatgcactg acttccaatt ttccatgttt ttatattata atttgtatct 420
atttttttga acaagtttcg ttcaaaactaa atcagctcgt agtttttcgc aataatgccc 480
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cc 542

<210> 1389

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1389

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tctgcagcat tcacgatcag tcattgatga ggtgtcgtat tgtgttttgc tgtaatatta 180
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tgcagttttc ttatggtaaa gtgcagtttt aatgttaatg tgtgttcaat ctgtgggtaa 480
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gn 542

<210> 1390

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1390

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caatgtaatg ataataattt atcttaattt gaaaagatat tgatttatga atatgaggaa 180

gctgtcacaa gcagtaaatac gogttgtcta atactaaaat atattatatc acttttatatt 240
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 tctaaagcca attttgtact ctgtatacac acaaaatatt taagtaacta ttgaaacttt 420
 tgccgtatat gcatttgtca tgaggattca cgaaagtga tgggtggcga cggcaaatgt 480
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 aa 542

<210> 1391

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1391

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 tgcttttggt gccctagttt tttcaaacct caaaggcatt tactgtatgg actgccatct 480
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<210> 1392

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1392

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 taattgaaaa agaggctgct gcttcttctg ctgatgcaac tgaggaaacg aataagccag 180
 agactgagcc cgccaagaca cctgaaccgg aaactaccac aaaaagtga ccccataatg 240
 tgtaaagtaa aaaattaatt ttaaatcaac tgaaataaat tgcataaccg aattgaaatt 300
 ttcatctgca tatgcataga tggcaattag ctgacagaca tattttgaaa atataactac 360
 atatatgtat taaacaatat ataagggcat atatataaat atatatatat atatatatat 420
 atatatatat atatatatat atatatagaa tatctgaatt agtttttaggg ggagatatat 480
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 aa 542

<210> 1393

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1393

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actattgaac aaaatcaaat gcaaaaagta aataataacg atttgtgatg cttgaactgt 180
gattcaaaaat gtgaaatagg aaggttgtaa aacgaacgtg acgtcttggt agtgtgtttc 240
taaaaactgtg tcagtagtgt ttttaagtccg atataaaatg gatgaagagg agaaaaagaa 300
taatattggt acacctaacc ataattcctt aataaatagt accggaaaac acacttctgt 360
aacacataat ggcgcgaaac ataattcacc tatgatcatc aacaatggcg taattatttc 420
gcacaacgat tacggcagta tcgttactgg aaggagatcg cgaaggatta catcaatgga 480
aggatggcct atctttctcaa aacattgtcc tggacttcgg cgagttatca tcattgatga 540
ta 542

<210> 1394

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1394

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atattatggtg attataggta agagaataact gcaatgatga tgggtgcctt ttaatatgct 180
tctttatatt ttgtaataac ttttaacttc ccgtagggtg agttatagtt atcgcaaaaa 240
atataaaacg aatttttttt tatatcttca cgtttcaggg tttctgaaca ttttgccat 300
agataaattg gcacacctta gaaaaaatgg atgagggtgt gtgtatgtat tggatacaat 360
ttagtccacg attttggcg cacggatcaa ccgatttgaa taattcaaaa acattatggt 420
cttttacata aggagacact tgctgattag ttttttccaa aggcagggtcc agcggtttcg 480
gagatccaga acagaatggt tttaaatatg ccatttgacg gtcgaaaatc agtattgact 540
gt 542

<210> 1395

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1395

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cccgttggtg agttgttttt gtttagttat ttttagaatt aagtttggtc aacttttatt 120
tcaagtgaag aagcagtatt atattatggt tataaatggc attgcatgta tgactcacia 180
aaattaaaga agtgagtgtg gcgattgatg atgaattaga aaacgggtgg aagtattctg 240
aagggtgcaca agatttgagt gattcagtaa ataaatcatc caaaaataag ttgaatgact 300
acatgatggc gtcccaattg aatccagaag ctgcogagtt tgtaccggtt gaagcgggta 360
gtcctgcacg atcagtatta tttttgagag aaggcttgct tgatgatgta atggctcgaa 420
gtccaagaca atttagtgct gctgaacaag ttcttaatgt accatcggat actgaatttg 480
catcagaaat taaatcanga ccaggagact aagtgc aaat ggttcttttg aaagcgataa 540

<210> 1396
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1396
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 aacccaaaaca cacttatttt ccatccggta caaaacaata cgttttatga tatcaaaaca 180
 ttctcacatg ccccgacaag aaatgtacca attgcaaaac agaaacctgg tcgaaaaaca 240
 ctggcagctc gtcagactac aaataatgtg caaccacaaa aaatctttgt gcctaatatg 300
 aatacaatgc aggacaagca acatgtatta ttgcaagcaa agttaatcaa atcggaacaa 360
 catataaaca aaactgttat gtatactact acaccaattg ctgtaatcga tgacaaattg 420
 gctatcaaag atttgtccca taaagaacca aaagtgaag aagtcaaacg cagtgccaca 480
 atgctataga acgcagatcc ggacaagtat caatgataaa atattgactg aaaatatgat 540
 gg 542

<210> 1397
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1397
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 ggagatcttt gaagatttat gatgataatg gtgatactat cattagtga gagttgggta 180
 caaccctaag gtctgatagg gtgtttcctt gtcatgccga ggatatgaac ttttctgaaa 240
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 aagacgttcc cataatatcc tcgcacgtcc attccatatc cacatccagt ggttcctccc 360
 aaaattccaa caaccctaac cccacacatt ccactttgaa atgctatgac gtctcctggg 420
 ttgcaatttc gccctaccat taccgcactg actgttacca gtggactggg cctgccattg 480
 cttgcaaattg atacaagagc ttcaaaccat ttattactgg gaaaaactgg ggaaatgtct 540
 ga 542

<210> 1398
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1398
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 atcatcccta caatgttacc aatgcgacct ggcaaataac ccggcctgca cggcgtctct 120
 aaattccact aaagacattg cagccgtaga atgcggaaaa cttcctcaac aagttagtga 180

aaatgatcgc tccttaatac gattttttgcc accaaatttc gatggacact tgtcaaccac 240
 caggggaagga gtcggatttc aatgcgcaaa aattgttgcc acgaataaca ttcaggggtgg 300
 ttataatatc acgagaattc ttogaacatg cattgtcgat accttaaatt gcgagaaaaat 360
 taatgaagac ttaaaaacaag aaggattttc ttcaatgatg tgcgcaactt gcaacacaaa 420
 tttatgcaat agttctactt ctttaagcat cacaatttta ttaccattta tattattttt 480
 aatcacaaaa gcccgctcta gggaaataat ttgagttaga tgaaaatttt caaagtcttt 540
 ca 542

<210> 1399

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1399

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 gttgtaataa ataaatcaac tataatttta gtgtgcgcaa tgacatctgt caagttattt 120
 totaatattc tgtctaaata aatgagaaaa atccaaaatg ttcaaaatgg agggatgcta 180
 tttgtcagga ggggggtatgt aataacagct atctgaatcg tcacatttct catagcattc 240
 tgggtggtata gtgatgggtt ctcgacaggg agcggggcaa ataggataat tatcttcaag 300
 ttctgaatct tcagaagatt gttccttttc tataatttca tcattttaat ttaatttggt 360
 tgacacacaat aaatggttta caaattgaaa actaatgtaa aaaaattatg agcaagtttt 420
 ctgaaaatta aaaataaaag atgacttaat ttagtatcag tgtcatcggg ttatggagta 480
 acatccaatc atgcaaataa atgattaatt atgaccatgc cagagacaga tttcacatga 540
 at 542

<210> 1400

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1400

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 gacaatgtat gtggttcac aataaaaaac gtaacgattc tattttatta cttatttttt 180
 ttgtggaatt ttgtgaaact atttcacaaa atttttgtac gatttatctt cttgctttct 240
 gattgtatac ttttgatctt agttttattc cacaatttaa cagcctcata caaatgagca 300
 tatggacgtg atgtcactat tttatccact taaaaaaaaa tggacctgaa aatagatcga 360
 gttctatatt gttcccat tttccaaatt gacttcccat caaagtcggg ggtaagtctt 420
 tgggttaaaga tttaatggaa gctttttgta ttttttttcc ttgtggaatc gacatttaca 480
 aattgttgac taaattcctc ttaatttctt aaattggaat cagctcataa atcaatgtaa 540
 aa 542

<210> 1401

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1401

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ttgatataca aaacattcga ttcatgaaag atcattccat aaaaaccata atgtatcagt 120
attatcaaat aataaaattt ttaataattt taactaccgc tgattatatt tcattgcttt 180
tttgtactgt gcagcataat ttaataaaat ataagcacct aaagcaagtc atatacagta 240
ctacatatgt tgaagaattt gatgaaagca atcaattttt gatttgtaat tgatttaa 300
atattatgtt aattaatttg aatatatgta ttagattata gattgttcat tcgtattgca 360
gaaatacgaa ttgaaaaatt aattatttaa ttaaagatct ataaatttcg tccaaaactt 420
aatcactgat tcaaaatttg tgcagtagtt gcacatatat attttatatg taatttagat 480
gttatttttt gcatattcaa taggatagct tttttacaaa aaatattatg taatcaatat 540
aa
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<210> 1402

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1402

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aaatttggtt cgcagccac tgcatagatt ctaactaact aaatacataa aatacaataa 120
gtactactta ctttatatat tattaagttt acttacaaca atattttttt atttattact 180
ttttttatat tgcacttctc agattatata tattattaaa atttattatt cgatgtatta 240
ttacaatcgt gccataaatt aaaaaatatg agtatcgctt gtaaataatat tagttaccag 300
ttagatgtaa tttttgtact ctcaaatttt aatcgaaacc aaatttttga ttattattaa 360
taattgataa gtagttttta ttaaaatagt tggacgtttg catctcagat aaattatatt 420
aattatttta taagttatgt atgcattgta ataagtcaca cttctataaa ttaattttta 480
atcaaattct tgggtataat ngaaaattta ataagctcac tatatattta tgcttatata 540
ta
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<210> 1403

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1403

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gcttcgactt acttttattt catttattaa acgcacgttc attcattgaa tcggaaaaca 120
tggatatgga gagacagtcg ctccatagtt acactaaaca taacctaaaa tattggtgta 180
taactaaaag ataacgatat tataatgttt cgagtgaat ttttggtata agttctgtgt 240
attaaattaa ataatagttt agaccgaaga tatcacattt gtgtcaaaat gccaaatgct 300
aatgtgacaa acggtgcatt aaaatgaatc tcataacctc tgtgtatatt ttggttctta 360
gcaaaaattt agtgtacgct gatagtggat atgtgtaaat tagacgttac tagaaatttt 420
tgattttaat aatgagtatt ggtaaaatgt gtacgcaaac gagcgtctac tagttggacg 480
tatgtgataa tggctggtgt cggacataga tctagcaacg ctcacaaaag acgtcttaac 540
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<210> 1404
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1404
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 aatgttgctc cacctagaat gcaagatgtt gtccgtccaa aaagatattc ttgtcaaaga 120
 cctggtggta ttgtaccaga aacaacatg caaggccaac cgcagcaaca acaacctgta 180
 tatcaacaga actactatgc aactgaatat actccgcctg tagcaaatga acaaaataat 240
 tcacatcaag gacaacatat accacaagca ctaaattggga tgccccaacc aggggggtcag 300
 gttgtacctc ctaatatattc tgtgccaccc ccgcaaaciaa tgccttatgt accagaacca 360
 gttcctacac aggtcataac cactagtaat caagtgatgc cgcaacaagt tcttgccctc 420
 aatatcctca agttctatgc agtttaattc gggaggaccc tacatggctc aaataataact 480
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 atccctcata 550

<210> 1405
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1405
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 ctaccatttt ggttgatggc gatgatctga tattacgata aggaaaaatc tggaccacga 180
 gataactgta accgcgccag ttaactcgtt caggatgtgg tgtaagtact gccttcatat 240
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 gttactcctt tgactgaatt aatgaacacc ctctaattta ttatggaaat ctctacaatc 360
 ttgtaatat ttacatgattg tattacagtt tatgctgtct gagcatagag aagcacctgg 420
 aaccataaat ggcttcttga aaacatgcat cacatctcat gtctacacat gtatcctgca 480
 ttgatgagaa ggggtgtcaaa tcacatccat acataatgat gtacatatat cctgcattag 540
 tgaagagaga 550

<210> 1406
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1406
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 naggnttgnn ggctcgtnac nagacnctt gnnnncgntc aantagccca ngattnngttt 120
 ctcacannat tgntggngtg ttnttctctg cctnaaagac ngatacacat ggatntatgt 180

cgngngnnant ncatgtactg ncggccagnn ttgtaatttg ngacaaggan gntgctnttn 240
 caaacctgan cntgcnattc tncacgcacc atgcaatgcg acanacanatg aattgacctg 300
 anccctacna ntgcanaagg ngtnantttct gtctgnaaac ggannntgatg gantnttnna 360
 agaatgcgnc ngtaanannn natnctntgn cnganctgga cgtgcnccttc tgcttggata 420
 ccaactttta cnaagacctg ccnatatgtc atnaantgag aacccgcttg ccangacata 480
 tcnntntttt ctctgaaaac agaacattta tngtnnaann gctatncctc aggtntaaan 540
 cccatcgang 550

<210> 1407

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1407

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 tagtatattc atttgaatag acttgagatt gagacaaata gcgcgcgatc tgcaagtcac 180
 tgtgaccaac ctttgacgtt tagcgaattc atcgtgtatg tgttttggaa tcctattatt 240
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 actaagtgat tttcaacaaa gattttttta gaaataaatt ttaatcaaaa tcgaatctgc 360
 tacaataatc oggetgaacc agtagatgac cttgacaacg agtttgattc gtagcgatta 420
 acgaacgctg cgggaccttc cgaccaatac tcacggattt attttgatta aatgagattc 480
 tgttataagg tgacgtctag aaatagatgc agatgtgtaa ccttgtttgc gnggcagaga 540
 aactgtgtcg 550

<210> 1408

<211> 428

<212> DNA

<213> Ctenocephalides felis

<400> 1408

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 gcatggtaaa ctacttttgt tcttatttaa tcggatgttt aattaacaga tatccaaaga 120
 tgtaacttca actttccaat ctagtacaaa gaattttttt gaacaaattt atggaatgtt 180
 cggatttcga ttcccaacca ccaccgatg ggattttgca aatcccacca ccaccgccac 240
 cgccagaacc aaaattttat gaattgtgcg aaaaattgga agaagatcgc cgaatatcga 300
 tgtatgctct tgaaagcacc ccaggcttca ccatgtacac agaccactgg tatataatat 360
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 aaaaaaaaaa 428

<210> 1409

<211> 455

<212> DNA

<213> Ctenocephalides felis

<400> 1409

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taagggttaga catggaaatt gtgaagtatg tcacaggcac gccgcacggg acacctcaca 120
ttcagccatt cagggatcat acaagtggcg accgtgcgaa ggcgcgagccc tgcgtgaacg 180
cgcgaaacctt ccgccataat ataggtttca gtttaaattt atagtatcat ttcaaattta 240
acttttagaa cagaacaatt ttcaaatact atatctgagt attatctgac caatactgct 300
agatctatta cacttatgca gtcacaaatt agtacataaa agaaaacaat ataagaaaaa 360
aatattattt tcttgcatca ttcaaaagaa gctatgtaaa tattaataaa gcataaatag 420
aaagattcac ataattcaaa aaaaaaaaaa aaaaaa 455
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<210> 1410

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1410

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aacaattggc tttttggctg cggctcgtgc ttcaaacacg atctcattgg atgaaagttt 120
tgagtcaagt tttaatgatt taaaatcact cgagagcaga ggggcattag aaaataaact 180
attagcagct gctgaagatc tgagaaaaac tttaagaaaa ggtggtaatt tgactaatgg 240
cgaagttagt gacccatggt tccttgaaaa tgttgatgct gacattgaac taccaaacat 300
tgccaagcta aacggagctc ttgccaaagt aacagttgat gggttatcta gtttcaatat 360
aatcacata aaagtgaatg tgctcttcat gaaagctact ttcaatatca cttttgacca 420
tctcatggca aaggtctat acgacattga aggcaagttg gcagatttgg ctaagttggt 480
ggcaaaggtt cttttgatat catgnacgtg attaaacgct gtggacatgt caactatggt 540
tgaaagggtta 550
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<210> 1411

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1411

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gtcgggtcaat tctacttaat cgctgtgcaa ttatattgta acttgtaaatt aatcgttatg 60
ctatagctca gtgtcgtaga gttattttga tatgaataag tcataagttc tatcaagata 120
taaaattatt gcctaataatc aatgatcacc aaacaaatag tttttaattc gttttttatt 180
taatttttaag agaattattat tatgaatatg ttaagattat ataaatagtt atgaacgttt 240
ttcttaagaa atactcaaag acataatata tacaaacttc atataaatct gttcttaata 300
taaaacttgt taagagattt tgtcatatct ataaatttta tttacttcga aatactatta 360
aattgtgcat aaaattattt gatatacagt gttcttttta atatccactt ttattatttt 420
aaattcatat agtattttca tattttatgt taataaaata tatttaataca gacactaact 480
cttattttata ataatatgta catttggtct catgatagaa atactgtgat gctaaaaaaa 540
atgggtgtcgg 550
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<210> 1412

<211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1412
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 aaatatcggt gtttgtgaaa atttgtgtga aaaagtctat taagcatctt caagtttggt 180
 atggctaaac ctcacctgaa gaaagtagcg ttcctgagga cccgctatgt cacagcacta 240
 aaattaagat ttttcttctt tgtgacaata ccagtttggt atttgggtatt tacagcggtta 300
 acaaaacaat ccgtttcttc tgaagatatt gaattattacc cgcagacacc agaaattact 360
 ggatcgcgga aattgcttgg ctatctttca ccgatgccaa gaattcgagc ctggcagatg 420
 atcatgggtca taactgcacg cccgcagcta tcttagattt tccctctgat ggattcacca 480
 gggagcaaag aagacagggc tgggcctggg ccatgccgca tcgatctact gttctggctt 540
 tagcatagtt 550

<210> 1413
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1413
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 catgggttcaa caactaatag tggatacccc aagccttctt attctgggtta taatgcaggt 120
 tatgaatcac taagccaaaag ccaagattat acaaaaccca gtggttctta tggccagga 180
 ggaagtgtta gcggtactac agtgggtgct caggtatctg gcaaattcaa cacaactaca 240
 tcggggagtg ttggtccaaa cagtcagggg gctaattgtg agacaggtgc aaataacaca 300
 gatatagcaa gcgctatgta taataaaact catacagcat taaataaagt taattcttat 360
 gagaagcaaa catttcattc gggcacacca ccaccgttca acatgccagg aagtgggtcc 420
 agtgggtacta cttatggggc tccgcattta tttataccaa caatggcacc tcaccaacaa 480
 gctcatcata atacacagat gctgatcagc ctttgataga ttatgggggc cttcacaagt 540
 agtcacangg 550

<210> 1414
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1414
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 aatttttaagt tattttttta attatgatca tatcttttta ttcctacatg tctttcattt 180
 tagtattgca tataattttt agtaaaaacc ccttttcagt tacattaatg ttttctgttg 240
 catgctacta gagaaagtag ttcattctaa tttaatgaat gttagtaatt gaatgcttgt 300
 ttagtggttag tttttgagat tgacaaaaat aacatctttt ctatctgatc atattctgtg 360
 tatttttata taatttatat taacagcttg cttttaataa ccgtttgaat ttagtttggt 420

attgttgtga tcaaaacgat aatttgcattg tcttcaaaat ttctttgccg gaaatttgga 480
 aaaaagtntt cttatttatg accaatttat gntgagtcta attgggttta ataattatga 540
 attctggaca 550

<210> 1415

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1415

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 agtggctctgg ggctcgaaa atctgttttt gttgtcatta taatagtagg atgtttttct 180
 attttatggc caaaaatatt tcatcccatg tttatgggat ttccagatca acaaattatg 240
 ccaaagtcta tggacagata cgcagggtgc tgcgatgtga tattcagcag cgatatgaac 300
 gctctgatga cagtaactaa tttatgtgcc caagtgtcta aatttcaaga tttcaatgaa 360
 acaaagttat tgggctcaaa cgtgaataat agatgtaggg ccgaaatatt atcacgctgc 420
 ggcttgcat attaccgcta tttcatccg gaaaagggtg tccagatgtt aaaggagtga 480
 aacgccttct tacgagatng ttcgcttaat ggctcatctt gcctnagtga gttcggaatc 540
 ctccatggct 550

<210> 1416

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1416

attaaaaaaa aatctcaaat cgatcataaa agttttaata ttaatttcag taattaatac 60
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 atctcccagt tggatgatg atgcaaaagt tggaatattt ttacattggg gagtttatgc 180
 agtaccaagt tttggcacag aatggttttg gcaaaattgg caaggatcta atgtgtcctc 240
 ctacgtggat tttatgaatc agaactatcg accgggattt acatatcaag attttggtac 300
 agaatttact acggaactgt ttgatccaaa ccaactgggt gagctattcc aagcttctgg 360
 ggctaaatat gttgtgttaa caagcaaaaca tcacgaagga tacaccctgt ggcatcaaag 420
 tactctttca gttggaactc ccaggacgtt ggtgtcctata aggatttaag aggtttacta 480
 ccaacgcaat tcgcagcaaa accaactacg tttcgtctct atcactcttg tcgatggtca 540
 cagacttat 549

<210> 1417

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1417

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 ataccagacc gcagaaagtc caggatcaac atgctgcaca gcgctgtatt ccgatgtaga 180
 agtgataaag atggaaatct cggatcattt tgaagttggt gacccgaaat ctctacagat 240
 agcaaatagt ccgggtagtc cagatagaca attctgcagc tcaaccacgg cgtcaattgg 300
 ggaaattacg acaaacgatg atattaaaga agacagtcca aggcgtcttt gccttggttg 360
 tggatgataa gcctctggat tccattacgg cgttgccctca tgtgaggcat gcaaagcatt 420
 ttttaagaga acaatacagg gtaacataga gtataattgt ccggcagttg gagattgtga 480
 aatcaataaa cgaaggcaaa agcatgtcaa gcctgtcgat tcaaaaatgt tagcattgga 540
 tgtaaaaga 549

<210> 1418

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1418

gccgtcaaaa atggctggag tattatttcg tgtaatttg gctaaaacac aattgggcat 60
 aatcagccca gtttttacia ttagacataa cagcgttga ccaccaccac caggcactcc 120
 acctccaaa acacgtacta aatttggtcc tcttaaagat gaagacagaa tttttacaaa 180
 tctttatgga cgtcacgatt ggagattgaa aggatctttg aaaagaggag attggtataa 240
 aactaaagaa atcattctta agggagctga ttggatcata aatgaaatta aaacttcttg 300
 actcagaggt cgtggaggtg ctgggtttcc ttcaggtttg aaatgggtctt tcatgaacaa 360
 accaggagat ggaaggccaa aataccttgt ggtaaatgct gatgaaggag agccaggaac 420
 atgtaaagat cgtgaaataa tgcgacatga ccctcataaa ttggtggagg ctgttaattg 480
 caggaagagc atggcgctcg actgctcatt acatagagga gaatttatat gaacatcaat 540
 ntcagttgc 549

<210> 1419

<211> 406

<212> DNA

<213> Ctenocephalides felis

<400> 1419

gttaatttaa aataacaaaa tgaaaggaac attattaata ttatcatgtc ttgtgatcat 60
 gataagtgcc gaatatgctg acgtagatgt gtgccagat ttggacgatg gaacttttct 120
 tgctgattca aacaattgcc aaaatttctt catttggtgatt ggaggccgag cttggaaaat 180
 gtattgtcca ggatcacttt tatggaatga tcacgaagga acatgtgatt acgcacaaaa 240
 tgtagaatgt taccaaccag aataaaacat tttaatatct gacagcgatt ttctgaaact 300
 atatttcata ctactgttat aataaattta tcttcattgc tctcctocta taaatttatt 360
 ccgttttaaat aaaatcaata taaagacaaa aaaaaaaaaa aaaaaa 406

<210> 1420

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1420

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agaacagaag tatatatgat gagtatcagt gcaatttaaat aatgagagaa cgttgtttca 60
atattatttag taccatatac catataatga attagtagaa aaaaaattgt tgtagtgttt 120
tagtatttttc ggacatcaac tcattaaatt cataatgtct tcaggtagac ctataaaatg 180
tgttgtcgtc ggcgacggaa cagtgggaaa gacatgcatg ttaatatcat acacaactga 240
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tgatggaatc cctgtttcat tggggctttg ggatacagct ggacaagaag attatgatcg 360
attaaggccg ctgtcttata cccaaactga tgtatttctc atatgtttta gtgttgcaag 420
tccgtcatct tttgaaaatg tcacttaaag tggatcctg aaataaaaca tcaactgcctg 480
atgcacctat aatcttgtgg accaaaatag attaagagac gatagagaaa ccttaagttc 540
tctacagac
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<210> 1421

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1421

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cctgatgtta agaggtgcat tcttagatta ttagaggac cagttagaca actcggcatg 120
gaaaatactg aattgatgaa attagttgag gcctgtgcaa agggatctga aaccttggtt 180
acaaggggta tacatatttt gaccgaaaga agtttgcccta gcatggaact agtttctaga 240
gttcgagatc tttatcacac taaagtatct gatgtccgat tcttaatacc agtattaaat 300
gggtcttaata aagacgaggt tatagattct ttgcccaaat tcattaaact aaatccagta 360
gttttaaaagg aagtttttaa taagctgctg aataatcaag caggctctac atcatatcct 420
agtccagtta cacctataga gttgtttag cgtacatata atagacacaa ctagtgcaga 480
tttaaaattc gagtgaagc aacaagttgt gttagcagag aagnaattac acccagaang 540
atgcagagt
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<210> 1422

<211> 534

<212> DNA

<213> Ctenocephalides felis

<400> 1422

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tggtcaaaat tgatggaaag acattcactt tcctcaattc aaaatgtgag gctgctcatt 120
taatgaagag gaaccacagt aaagtaacat ggactgtctt gtacagacgc aagcacaaga 180
aaggtaaga agaagagttg actaagaaac gtactcgtcg tacacagaaa ttccaacgtg 240
ctatcgtagg agcttctctt aatgacatcc ttgccaaagag gaacatgaaa cccgaagtac 300
gaaaggcaca aagagaccaa gctatcaggg ctgcaaaaga gcagaagaaa tccacgaaag 360
cagcaaaaga ggctgcagct ccacctaaag tgaaagcccc accaaaagct aaggccgcta 420
aagtgaacca gaaagcacco ccagggttgg cggtaaacga taagtgggtg tggagattat 480
tctaattgtat tatatgaaaa ataatttgta aaatgctaaa aaaaaaaaaa aaaa 534
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<210> 1423
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1423
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 aggccaacaa tgtcccatgg atggatgccg aagctctgaa aaaacttaac aagaacaaaa 180
 agcttgtgaa gaaactagct aaaaaatatg atgctttctt agcttctgaa tctttaatca 240
 agcagatccc ccgtttgttg ggtccagggt tgaacaaggc aggtaaattc cctgggtctct 300
 tgtctcatca ggaatccatg gtgcagaaga ttgatgaagt taaaggaact atcaaattcc 360
 agatgaagaa ggtgttgtgt ttatctgtag ctgtgggtcat gttgatatgt ctctgacga 420
 gttggccaaa acgttcactt gtcaattaac ttcttggtgt cacttttgaa gaagcattgc 480
 agaatggttag gtctctcatg tcaaatccac tatgggcccc caaagatata taatacataa 540
 tgatatgtt 549

<210> 1424
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1424
 aaaattcaca ttttaatacac aattaatgtc tagtttctaa accacaagga atatacttat 60
 aaatatatgt atataaatat aaggaactga ataattcttg atatttggtt gtttgggtat 120
 ttatgttgta caattaatat atcctttacc cttaaagtcta catatattat caaccatggg 180
 taaagcagaa gtaggtaccc ccaagtacat agccaacaaa atgaaggcca aaggcctcca 240
 gaagctccga tggtagtgcc aaatgtgtca gaaacaatgc agagatgaaa acggtttcaa 300
 atgccacaca atgtccgaat cccatcaaag acaactttta atctttgctg ataactcaca 360
 catgtacctt gatcaatttt caaaagaatt ctctgcggct tcttagaact tctgagaaga 420
 caatttgtaa ctaaacgagt ggtgctaata aagtgatcag gattatatat ctgataggaa 480
 tcatttgcac atgaatgctc aaagtgggtg attgcggggg tgcaagtggg tggggaggaa 540
 ggcatgcgt 549

<210> 1425
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1425
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 atttgaaaag gctgttgatg aacctagttt ttctgtagct tatgcatata tgtgtaaaga 120
 gtttagctctt atccaagttc ctgtgacca acaaacgggt caatcttcaa ctgttgaata 180
 cgtcaatttc cgtaaattgc tcttatcccg ttgtcaaaat gaatttgaga aaaatacagt 240
 agatgaaacc gcaagagaag ttaaactgaa agaaattgaa gcgtgtacag accctgagaa 300

<400> 1428

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rchsnccgaa atatgagcat ttacgtcagt tttgtatgga attgaatggt ttagcagtgc 60
gcctacaagg acaatgcttt cctgaacaat gtacacaaat gactgcaact gaacaatgga 120
tattttctatg tgctgcccac aaaactccaa aagaatgccc agcgatagat tatacaaggc 180
acacttttaga tgggtgcagct tgtttattaa acagtaataa atattttccc agtcgtgtga 240
gtataaaaga gtcacacagtt gctaaactag gttcagtgtg cagaagagtg tatagaatat 300
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ttgtgcccac tttagaggag gatgcaacta tcggagaatc agaggcttaa gcatttatgt 480
tattttattta aaatatctgt gcatgcattt tttatttttc ttgtgagtga ncgtttatta 540
aatcattatg tnnat 555
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<210> 1429

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1429

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ggatacttta aagatcaaaa tactattata gctgtattaa agaataaaaag tgaaaaaata 120
ttgtctgcca aaaatattgt tatcgagtt ggaggacggc ctaactatcc agatattcct 180
ggagcactag agtatggaat tactagtgat gatattttca gtttagatag agaacctgga 240
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attccaaaat cagtagaaaa atgctcagat ggcaaaacttc ttgtacttgg taaatcttct 480
gataatccca cattcagatg tatttgatcc atttggtgta tcggaaggaa gcttaacaaa 540
gattaaaat 549
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<210> 1430

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1430

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ctgtcaacta tgctgatatt ggtctaataa aagtggcaaa agacattgta ttcggtgaca 180
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tagtttacaa aaatgaactt gtggcattac atcgatgcac ttatctcctg cagaggtggc 480
aggcagatat tttgtgaagt gcgagatttc caatcctgga ttaattctga aattgaaaaa 540
ataaataga 549
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<210> 1431
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1431
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 atgttcttca aatcggcaag cgaagagagg gaacatgccca tgaaactcat gtcttacttg 180
 atgatgagag gagaactgac cgagaggctg caggacttga tcagaacacc aactgttcca 240
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 gacctgccgg aaagatctcc accctgggca agatgatgaa ccaacaaggt gttctcggga 480
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 aataaaata 549

<210> 1432
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1432
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 agctgtctcaa cgcgagcacg tattagccgt aactcgggat tttattttctc agccccgatt 120
 aacatacaaaa actgtctctg gtgtcaatgg acctctgggt attttggatg aagttaaatt 180
 ccccaaattt gcagaaattg tacaactcag actttctgat ggaactttac gttcaggaca 240
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 ggatatgtta ggtcgtgtgt tcaacgggac aggaaagcca attgacaaaag gacccccaat 420
 tttggctgaa gatttcttgg catccaaggt caacccatca atccctggtc tcgtatctat 480
 cctgaggaaa tgatccaaac tggatctctg tattgatgtg atgaactcat tgtcgtggac 540
 agaaatccc 549

<210> 1433
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1433
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 ggtgatgtga aaatgcaagg acaagcatat aaagataaaa gtaaaccggc tgatattcgt 180
 agcagcaata tatgtgctgc gaaagctgtt tctgatgcag tacgtacaag tttgggaccc 240
 aggggtatgg ataagatgat ccaagcctca aacgggtgaag tgacaattac caatgatggt 300

gccacaattt tgaaagaaat gaatgttact catccagcag ctaagatgtt ggttgaattg 360
tctcggggcg aagatattga agctggcgat ggcacaacat cagttgtagt agttgcaggt 420
gctttgctgg aggtgctga aaagttactt cacagaggac ttcaccaac tgcatttctg 480
atgcatttca aagatgtgct ccaaagctgt ggaaattctt acacctgtca caccaattga 540
cttactgtc 549

<210> 1434

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1434

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taactaataa gcgtagtttg tgtaataaca agtaatttct attagtagtc ataagtaatt 120
gaagagaaaa ctattttcca tataagaatt gaaagcataa aatgattctc tccgtgctga 180
aaaaatctcg catcgtgcac ttgtgttttg ccatttcatt cttcacatca ggcctgatca 240
taaacattgc acaattcata ttatacacat gtctcaagcc tttcaacaag aggctttaca 300
gaaaacttgg ttattatttg tgctacacat tttacagtca gatagtgttt ttagctgact 360
ggtggtccaa atctaattctg accttacaca tatcaaagaa agattatgaa caatgtggga 420
aggaacatgg tcttttaatt atgaatcata cgtacgaaac agattggtat taggatggat 480
gtttacggaa aaaattgggtg tcttggaatt gtaggatatg caaaaagact attcaatata 540
tccgcatta 549

<210> 1435

<211> 509

<212> DNA

<213> Ctenocephalides felis

<400> 1435

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ttttatcaag atggcgcaag aattgaagct ggttttagaa aatattttca ccgagcagat 180
cctgatcaga aggaagacag ttacacaatg attgtatgtc acgccaatgt aattcgttat 240
tttgtgtgca gggctctgca atttcctgct gaagccttggc tgagactttc attaaatcat 300
gcatctatta cttggattag tatacagccc agtggtagag taattctacg agtttttggg 360
gaatcaggtc atataccagc aatacaagtt accagtcagt aaaattttta taacataaga 420
taatttcaat ttatttttat tcgttttctt gaaattttata tattttgtat caaattatgt 480
ttatatacct gcaaaaaaaaa aaaaaaaaaa 509

<210> 1436

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1436

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 agttgatgat ggtgcccact tactgtcact ggatggggca aattaatgaa tagggcccacc 480
 cataaattac angagtgaaa gtgcctttgt cgaccatgat catntccgca gtactctttc 540
 cgaaacaat 550

<210> 1445

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1445

gttatcaaca ggattttgga gatcgtgcaa ggtgtttcca acctagtcta acttcttcat 60
 cttcaatatg tgatgaacga ttcacttgga accctgataa tgagcaaaga atgattttac 120
 aagaagctct gtccaaagca cacactcatt taggcaactgg agcatcaata ggttccggtt 180
 ccatttctgg tagctccatt ggttcttctt ctacgtcgtc ttcctcatct agttcttctt 240
 caagttcttc ttcattggtc ggcagcggaa tgggagttag ttcaactcaa ggacaaaagg 300
 aaattgttca aatcagccca caaaaagtag ggcttaaatt aagaattaat gaagttcata 360
 aactaaatgt ttattatgca caagctgaga ttatccagta gattatatta tttgatggac 420
 ttgctaagtc tatggaagat gataagagag atgncagcat tggagattac tctcagaacc 480
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 gcaacatgcc 550

<210> 1446

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1446

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 ggctcaatga aagacagaca aaaggaagaa gaacttcgta attccttaga tcccaaatat 180
 gctcatttgg ctgatgatct acatgttgaa atatoggott tgggtcctcc acagaagctc 240
 acgctcgagt tgcttatgct ttggctgaag tccgtaatat ttggtccctg ataataatga 300
 tacaattcgc caagaacaat gcgtgaaatg atgactgacc caatgcccgc cagaagaaat 360
 gagangagca cccacattag acgaggtggt tggctgtggt gcttctcgng aggaggatac 420
 taatcgngca gcttcgacat ntggggnatg cttctgngtt ctaatgtgat ccggcctcac 480
 ccctctcac tcgtgtatcc tgtaactaaa tcttcattaa taacaaagtg ctgagaactt 540
 gtntaaaccc 550

<210> 1447

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1447

tcttattcat attaattata agaacattta ttngtatttc ttcaaattct tgattaggag 60
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atttactatc taatgaatct tcattaaaat attttctagt tcaagttttt gcttcaattt 180
tattattatt ttttatttct ttgaattttt ttttataaaa cttttttaga ataatatatt 240
ttaatgaaat ttatttaatt ttattaaatt catccctatt tttaaaaata ggggctgccc 300
catttcactt ttgatttcct agaataatag aaggaataaa ttgaataaat aattttattt 360
taataacatg acaaaaaaatt aaccctataa tttgttaagt tattgnatta atataaatta 420
ttttatttaa ttcattatta agaattataa ttggagctta ggtggattaa ataatcctct 480
tacaaaaatt atacttattc tcaatacact atggctgaat aatattgttt aataaataat 540
gaataatttt 550

<210> 1448

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1448

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attgcttcta acatataaaa aatgagtttg aaaagacagc gcgatgataa tcttaatgaa 120
gaacctgata agaagcttat caaccgttca tgtccatact tagatactat caatcgtcac 180
gttttagact ttgattttga aaaattgtgc tcagtctcgc taactagaat taatgtttat 240
gcatgttttag tttgtggaaa atattttcaa ggcagaggaa acaacactca tgcttacacc 300
cattctgtca gogaatctca tcacgtctac cttaatctga caacattgaa attttattgt 360
ttgccagaca attatgagat aattgactct tccttagatg atataaaaatt gtattaaatc 420
cagtgtttca cctgaaagca tagctgcatt agatgtaatg tgaagctatc tagagctatg 480
atggtctatg atatgcccg g aatgggtggtc ttataatatt aagcaatgct atgcatgtat 540
ctgcagcctt 550

<210> 1449

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1449

gtcagatcaa gaatgtgcca gtcttcccaa ttcaagatgc gatagtggca tttgtgtttg 60
caaattcaac tttgtgcctc atccagaaga cccaatatgt ctagaacgta aacaattggg 120
tgaacactgc aacgtaggcg aacaatgtca cacaaaattc aacttcaatg ctcatgtgt 180
ccgagaagtc tgtgtgtgca gggaagatca ccacgaatcg aggaacagaa cttgcatcca 240
atctaaaggc tataaccaga attgcggttga tgatatcgaa tgtttcatcg gagaagaata 300
cagagacagg atcagatggt tccagaacaa gtgtctttgc aaacctgaat ttccagtcac 360
tgaggacgga aatgcggtat ccggagctcc aggacacaaa gtgtgggtcct cggttatgac 420
attagcagtt atggcatcag tagcaaaaat catccgatgt aaaagtttaa aaatagaatg 480
tccaagaaaa taagaaaaga cttacaaaaa cttacttcga ttacttaaga acatcttttc 540
nagcatagn 550

aggaattatt tggagtgttg tcaaagtctt ttaaagtgtat taatattttac aatttgatta 360
 ttctcaaata acaaatatatt ttaatatattt tgtaagtgtta ttttatatat tatcgaagta 420
 aacacaaaga caaaaaatat atctacacat gtatgtatat atatatatat atatatatat 480
 atatatatat atatatatat atatanacac angnnnacn cacacacata natttctatg 540
 tgtgttnnatg 550

<210> 1453

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1453

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 atggaatagt tgatgagcaa caacaacctt caacctcctc tgcaaacctc aattgcctaa 120
 atccaactac tacttctact tcagaccgtc ccgcagcgac ggttttccaaa agaaaactgc 180
 cttcatatcg agaaaaaatg ccacgttctc gcacaagatc gcgatccgc agtcgtcggc 240
 ataacaatca tacaatcat cggagggact attctgatga gcgccattct ataagagtga 300
 ggtcttcttc tagaaggagg agacatcata gaagtaggag caggaataga gacagacata 360
 cacgtaggan aaacgagagc ggagatcatc atcgaggtta caggcgcagt tcaggagaaa 420
 ggagctatcg aagacaccac agacatggag atgattcagt cccgcggaac aagtacgcgt 480
 gaaaggcatc aggaaggctg attnagatga taggaggaca totcatgtca aacctgngat 540
 ataattggag 550

<210> 1454

<211> 474

<212> DNA

<213> Ctenocephalides felis

<400> 1454

gtencattgg tgcccttccaa acccatgtgt gtcgaatcct tccaggagtt ccctccattg 60
 ggtcggtttcg ctgtgctgta catgagacag accgttgccg tcggtgtcat caagtctgtg 120
 aacttcaagg atgcctccgg tggttaaggct accaaggctg ccgaaaaagc caccaaggga 180
 aagaagtagc tagatctacc gatctgttta ctgcagatgt tcaaacactgt aatgaaacac 240
 tacttccatc gcaaagcgtt tcgaagaaaa aaggcctcat tcattccttt actatatgtt 300
 ttttgactca gctttatatt ttatatgact attttataga ataataatta ttttatgttc 360
 tgctctatat taaaatgaat ttatattaat gtatggatat tatgtgctaa gaaagaactt 420
 gaagagattt gcagctgatg tgtattatag tatggnataa atggaancca aagt 474

<210> 1455

<211> 347

<212> DNA

<213> Ctenocephalides felis

<400> 1455

gtttngtctc atgcaataat taattaaact tgtttggttag aggtgcaaaa taaaattaaa 60

ttaaaatgac tgcctggaga caagctgggt taaactacat taacttttca acaatcgctg 120
 cccgaatggg cgcgaagct ttgaaatctg atctaaaaaa tgaggctttg aaacgggacg 180
 tatctagcat taaattcaca ccctggaagg acggaaaagc gatcaaaagt gaaaccaagt 240
 aatcacaaga tggaataata gacaattcac tcaaattaat aatgtgtacg taaccgataa 300
 caagaataaa tgtagtng atnaaaaaaa aaaaaaaaaa aaaaaaa 347

<210> 1456

<211> 356

<212> DNA

<213> Ctenocephalides felis

<400> 1456

agtttgctac acacagcacg tgtaaatttt cataaaataa attaaaaatg gataaacctg 60
 tagttcttgc tcgcgttatg aaagtcttgg gccgtacagg atcccaagga caatgtacac 120
 aagttaaagt tgaattttatt ggtgaacaaa accgacaaat catccgaaat gtcaaaggac 180
 cagtacgaga ggggtgatatt ttaacacttt tggaatctga acgtgaagct agaagactaa 240
 gatagattaa ttctaaaatg tgagaggtga tatcctgaac tataatatct ggggttcaatt 300
 atttgatgg aattataaat atacgactta tcactcccaa aaaaaaaaaa aaaaaa 356

<210> 1457

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1457

cttaaccacc gtcacccact cgccaaatta caccatggct gaaccagaaa aggctcctga 60
 acaaccaaag gtgccccac agaagcaaatt catcgcttca aagggtgatg gaactgtgaa 120
 atggttcaat gtcaaaagcg gatattgatt tataaataga actgacacca aggaagatgt 180
 gtttgtagat caatctgcca tagttaaaaa caaccogaag aaggctgtcc gcagtgtagg 240
 ggatggagaa actgtggagt ttgatgtggt aattggagag aagggaatg aggcagctaa 300
 tgtgaccggc ccagaaggag agccagtcaa gggaagccca tatgcggccg acaaacgccg 360
 cagctatcgc caatggagct ccctcgtgga ggacccaggg gacccagaag aaattacgaa 420
 ggaggcgaag gtaagaagg gtcgggttcg ggaggcgaga acggtgatgg caaggccgt 480
 caaggaggcg gcccgcgtg gccgattccg cggtcgccac gatacacact attacggcgt 540
 ggcgacggc 550

<210> 1458

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1458

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 ttacctaatt caagtggatc tcaagtagca aaagatattg gagataattg tttatatgca 180

ccagttgatg tcacatctga aaaagatggt gaggaagcaa tagcattaac taaagaaaa 240
 tttggtcgtc ttgatgttgc tgtaaactgt gctggtatcg gtgtagcatt taaaacatat 300
 aatttcaata agcagttgcc tcataaatta gaggatttca caaaagtttt aatgggtaat 360
 actgttggaa cottcaatgt aattcgattg ctgtggattg atgggagtaa atgaacctaa 420
 taaggatggt caaccaggag tgattgtaac acacaagtgt gctgcttatg atggcagatg 480
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 accaggcaag 550

<210> 1459

<211> 546

<212> DNA

<213> Ctenocephalides felis

<400> 1459

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 atttatttgc tcgtgttgtt cacttaaaca accttatgac tataaaggat gtaatcctcc 180
 atttgcaaaa aatatagcta caattgatga atcctatata atgaaagatc ctttttagtcc 240
 tgagaacaaa aatgaaattc ttatatggg agccgattgt agtatttgtc aagaatctgt 300
 atgcgatatca accacttgca gtatatTTTT catgaaaact ctatgcaaga aatgtgcatt 360
 gaaacagaaa aacatgtacc ctgaacgatt taaacaaatt attgacatgt ttttaaataa 420
 atgcttaggt agttgaataa atgttgtatt taaatttata tttaaaatta actgttaaat 480
 attgngaaaa agaaaatata gaaaataatt gataaaatgt gggatgatatg aaaaaaaaaa 540
 aaaaaa 546

<210> 1460

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1460

gattcagctt tgcatagaat tgtagatgca actgatgcaa ttgttagcac tgcatattcc 60
 cataaaagaa catttattat ggaagtaatg ggacgaaact gcggatattt agctgttgtt 120
 gcaggcttgt gtgttgaagc tgattttata tttgcgcccg aagatcctcc agatgccaac 180
 tggccaagtg ttttatgccc actattaagt caggaacgat tagctggaag aaggcaaaaat 240
 attatcatgg tatcagaagg ggcaattgat agaaatggag aacctataac agcagaaaaa 300
 attaaagaag tcattattgc aggtttaaat caggatacaa gaattacagt gcttgccatg 360
 tacagagagg tggaagtcct tctgcttttg atcgattact gggatgtcgc atgggggagc 420
 aagcagtatt agcccttatg gaagctcatg atgagtctga ccttgtgttg tgaccttgcc 480
 cgaaccaaca gtcgtcttca atgatggaat gtgttctcac caaactgtac ttacgcttgg 540
 aaaataaaat 550

<210> 1461

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1461

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caaactcatc cttttagtaa cgtgtcaaga agcgtggatt cgaagtaatc tacatgacag 60
aaccaattga tgagtatggt atgcagcaaa tgaaggatta catgggtaaa acttttagttt 120
ctgtcacgaa ggaaggtttg gagttgcctg aagatgaaga tgaaaagaag aagcgtgaag 180
aggataagac taaattcgaa agcctttgca aggttatgaa gaatatcttg gataacaaag 240
tagagaaagt agttgtgagc aaccgattgg tagattcacc ctgttgattt gtaacatcac 300
aatatggctg gacagccaac atggaaagaa tcatgaaggc ccaagctctt cgcgattcct 360
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tgatacttta agacaaaagg ctgatgctga tccaaaggat aaggccgtaa agatttagtt 480
atcttacttt tcgagacagc tttgctgcat ctggtttact ttagatgaac cccaagtccg 540
ctnaagaatt 550
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<210> 1462

<211> 312

<212> DNA

<213> Ctenocephalides felis

<400> 1462

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attgnaactt caagaattgt acgtaaaggc tttgactaat gaggagtgc aagctaaatc 60
accaattcca ccaacgaccc aagtctgcac acttttgaa aagaatcacg gagtatgctc 120
gggagattct ggtggtccat tgcttttgga tggcgagcaa gttggcattg cctcatttgt 180
tatcttcaaa tgtgcaatgg gataccctga ctatttcaca agattgtctc tatatgtaga 240
ttggattgaa caacacatgg attaaaaata ataaaaataat aatttaattgt aaaaaaaaaa 300
aaaaaaaaaa aa 312
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<210> 1463

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1463

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tgatataata caaaataaat acaatttctt acatgctatt attataattc aatattaaaa 120
catttgactt ataataaac aatgaatttc ttatatttat taatatgctc tctttgtgctg 180
gtagtaaatg cgggtgggga tacattagtt ttattagaca atcttgcaat taaagaaact 240
cattccatat tttttaaaag ctacaagat agaggttatg ttctaacatt caaattggct 300
gatgaagcca atttagtttt atctaagtat ggagaatatt tatacaagca tttaattcta 360
ttttcacctg ctgtggaaga gtttgaggga tcattaagtg tcgaggcaat tcagaattca 420
tagatgaagg tggcaatggt ttggtagcag gaagtgaatc ctggtgatgc aattcgtgaa 480
tagctctgaa tgcggtttga ggagatgagg aaggacactg tatggacatc ttaatatgat 540
ggtctgataa 550
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<210> 1464

Parameter	Unit	Value	Standard Error	t-Statistic	Probability > t	Lower Tail Probability	Upper Tail Probability
Intercept		0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age	Years	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age squared	Years squared	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age cubed	Years cubed	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age quart	Years quart	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age quint	Years quint	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sext	Years sext	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sept	Years sept	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age oct	Years oct	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age non	Years non	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age dec	Years dec	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age elev	Years elev	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age twelv	Years twelv	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age thirte	Years thirte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fourte	Years fourte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fift	Years fift	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sixte	Years sixte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sevent	Years sevent	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age eight	Years eight	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age nine	Years nine	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age ten	Years ten	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age elev	Years elev	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age twelv	Years twelv	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age thirte	Years thirte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fourte	Years fourte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fift	Years fift	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sixte	Years sixte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sevent	Years sevent	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age eight	Years eight	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age nine	Years nine	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age ten	Years ten	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age elev	Years elev	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age twelv	Years twelv	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age thirte	Years thirte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fourte	Years fourte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age fift	Years fift	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sixte	Years sixte	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age sevent	Years sevent	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age eight	Years eight	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age nine	Years nine	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age ten	Years ten	0.0000	0.0000	0.0000	1.0000	0.5000	0.5000
Age elev	Years elev	0.0000	0.0000	0.0000	1.0000	0.5000	

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<210> 1465
<211> 550
<212> DNA
<213> Ctenocephalides felis
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<210> 1466
<211> 546
<212> DNA
<213> Ctenocephalides felis
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536

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 aaaaatgngc ttctgtcca ctttcaatgt atcaatggcg gagcatgctg gaataactgt 540
 ttcaga 546

<210> 1467
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1467
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 aaaaatagca tttataaat tacaatggcc cacctaaaca agagtttgaa accaataaat 120
 tactccaaca cgtcattcag acaotTTTTT cttgtattat ttttcgtatt ggTTTTcgcc 180
 ctCagtattg ctttattagt tttatttcca tatagtggaa aaagacatga aatctataag 240
 gatataagtt tggaagatgt cataaacggt ccagaacaaa tcattcatga tcaagctccc 300
 tcagcaaate ctcgcaatcc aaaatgcagc cactgggatt gttttaatgt gtatcgctgt 360
 ggcaataaag ggcacaatca aatatctatt tatatttatt caattaaaaa atatcttgat 420
 gctgatgata tacctgcact ggtatcatgt gcaaagaatt tattttattt taaaaactat 480
 aaaagatnca aatttacaca tcaaactctga tgaggctgga tattggtcca agattgtact 540
 taaatcaaac 550

<210> 1468
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1468
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 gcagtgcctg gaatttcttt tgtcaaattg acatgcgtgc attgctctac aaaatgtgct 120
 acattgaagg agtatgttac ccatttgagg agcaaaatac acaactcata tatgagccgt 180
 ttagctgcac gtcacaaatc tcgattggcc aaaatgcgag cacaacagag gaatgctcag 240
 cgagagatcg atgaaaagaa tcaggaggac tattatttaa agacaaagtt ttgtcctact 300
 tgcaaactta attacaggca actcagagct gaacatcaag cttctgaagc acataacgat 360
 attaagaagt atttgaagcc ttattgtagg acttgtcgta tgactttttc aagtcctatg 420
 cgttatgaag tacatatttg ttcaatgcac acataaaaaca taaagctcat ctggagtatg 480
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<210> 1469
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

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 gogctgcccc cgatttgtag aaacgttgag agcaattgga acgtgtcaac atcgagatca 240
 aatcacgtct tgaggagacc attcagttgt atgaaggagc ccagagagat ttgagaacca 300
 agcaacagga gttgcagagg gtcaaccacg aattggacaa gaccagggaa cagaaagatc 360
 agttggccag ggaaaacaag aaattgggag aogaattggg agatgctcgc aaccagttgg 420
 ccgaatacaa cagacgtttg cacgaattgg aactcgaatt gagaagactc gagaatgagc 480
 cgaagagttg ctgctgcatc aagaggccga actgtcgcaa ggccaagaca cgttccacgt 540
 tggcnacgat 550

<210> 1470

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1470

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 tgcacattca aaccggacag tgcggaaacc aaattggagc taagttctgg gagatcattt 180
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<210> 1471

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1471

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 cattggactt cactttcgtg tgtccaactg aaatcattgc cttctctgac cgcattgatg 180
 aattccgcaa gattggatgt gaagttgtag cagcctcttg tgattctcac tacagccact 240
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 accaaaacttc 550

<210> 1472

Parameter	Value	Unit
Temperature	25	°C
Pressure	1	atm
Time	10	min
Concentration	0.1	M
Volume	10	ml
Flow rate	1	ml/min
Wavelength	254	nm
Path length	1	cm
Refractive index	1.33	
Viscosity	0.01	P
Density	1.0	g/cm ³
Surface tension	0.072	N/m
Electrical conductivity	0.1	S/cm
Dielectric constant	80	
Thermal conductivity	0.6	W/mK
Heat capacity	4.2	J/gK
Enthalpy of fusion	10	kJ/mol
Enthalpy of vaporization	40	kJ/mol
Enthalpy of combustion	100	kJ/mol
Free energy of formation	-20	kJ/mol
Free energy of activation	50	kJ/mol
Equilibrium constant	10	
Rate constant	1	s ⁻¹
Half-life	10	min
Decay constant	0.1	s ⁻¹
Mean free path	0.1	μm
Debye length	1	nm
Wavelength of light	400	nm
Frequency of light	300	THz
Energy of light	3	eV
Wavenumber	25000	cm ⁻¹
Mass	1	g
Volume	1	ml
Area	1	cm ²
Length	1	cm
Time	1	s
Temperature	25	°C
Pressure	1	atm
Concentration	0.1	M
Flow rate	1	ml/min
Wavelength	254	nm
Path length	1	cm
Refractive index	1.33	
Viscosity	0.01	P
Density	1.0	g/cm ³
Surface tension	0.072	N/m
Electrical conductivity	0.1	S/cm
Dielectric constant	80	
Thermal conductivity	0.6	W/mK
Heat capacity	4.2	J/gK
Enthalpy of fusion	10	kJ/mol
Enthalpy of vaporization	40	kJ/mol
Enthalpy of combustion	100	kJ/mol
Free energy of formation	-20	kJ/mol
Free energy of activation	50	kJ/mol
Equilibrium constant	10	
Rate constant	1	s ⁻¹
Half-life	10	min
Decay constant	0.1	s ⁻¹
Mean free path	0.1	μm
Debye length	1	nm
Wavelength of light	400	nm
Frequency of light	300	THz
Energy of light	3	eV
Wavenumber	25000	cm ⁻¹
Mass	1	g
Volume	1	ml
Area	1	cm ²
Length	1	cm
Time	1	s
Temperature	25	°C
Pressure	1	atm
Concentration	0.1	M
Flow rate	1	ml/min
Wavelength	254	nm
Path length	1	cm
Refractive index	1.33	
Viscosity	0.01	P
Density	1.0	g/cm ³
Surface tension	0.072	N/m
Electrical conductivity	0.1	S/cm
Dielectric constant	80	
Thermal conductivity	0.6	W/mK
Heat capacity	4.2	J/gK
Enthalpy of fusion	10	kJ/mol
Enthalpy of vaporization	40	kJ/mol
Enthalpy of combustion	100	kJ/mol
Free energy of formation	-20	kJ/mol
Free energy of activation	50	kJ/mol
Equilibrium constant	10	
Rate constant	1	s ⁻¹
Half-life	10	min
Decay constant	0.1	s ⁻¹
Mean free path	0.1	μm
Debye length	1	nm
Wavelength of light	400	nm
Frequency of light	300	THz
Energy of light	3	eV
Wavenumber	25000	cm ⁻¹
Mass	1	g
Volume	1	ml
Area	1	cm ²
Length	1	cm
Time	1	s
Temperature	25	°C
Pressure	1	atm
Concentration	0.1	M
Flow rate	1	ml/min
Wavelength	254	nm
Path length	1	cm
Refractive index	1.33	
Viscosity	0.01	P
Density	1.0	g/cm ³
Surface tension	0.072	N/m
Electrical conductivity	0.1	S/cm
Dielectric constant	80	
Thermal conductivity	0.6	W/mK
Heat capacity	4.2	J/gK
Enthalpy of fusion	10	kJ/mol
Enthalpy of vaporization	40	kJ/mol
Enthalpy of combustion	100	kJ/mol
Free energy of formation	-20	kJ/mol
Free energy of activation	50	kJ/mol
Equilibrium constant	10	
Rate constant	1	s ⁻¹
Half-life	10	min
Decay constant	0.1	s ⁻¹
Mean		

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 ttgaaatctt 550

<210> 1475

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1475

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 ct 542

<210> 1476

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1476

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<210> 1477

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1477

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<210> 1483

<211> 542

<212> DNA

<213> *Ctenocephalides felis*

<400> 1483

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ac 542

<210> 1484

<211> 542

<212> DNA

<213> *Ctenocephalides felis*

<400> 1484

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aa 542

<210> 1485

<211> 542

<212> DNA

<213> *Ctenocephalides felis*

<400> 1485

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aa 542

<210> 1486

<211> 540

<212> DNA

<213> *Ctenocephalides felis*

<400> 1486

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ccagactact cacaacgtca acactacccg tgtagccgaa acatcagaat tggaaaagttt 480
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<210> 1487

<211> 542

<212> DNA

<213> *Ctenocephalides felis*

<400> 1487

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<210> 1488

<211> 542

<212> DNA

<213> *Ctenocephalides felis*

<400> 1488

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<210> 1489

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1489

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cagctgaaga ggccaaaaaa atgggcttgg taagcaaggt attccctgct gataaattgg 180
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agaagagagc attccatgct acatttgcca cttaaagacag attggaaggt atgactgctt 360
tcgtagagaa acgagcacct aactttaaga atgaataaaa agactactcg aattttataa 420
ctctatatgt atatatatta cattaccttt gtaataggta atatgaataa cctctttatt 480
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tg 542
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<210> 1490

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1490

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gagatctgtg taccatttga caatgttagc agtgcctcat ttgattgaga cgaagggaaa 180
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ga 542
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<210> 1491
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 <213> Ctenocephalides felis

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<210> 1492
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 <212> DNA
 <213> Ctenocephalides felis

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 aaagtctttt ccagttaaag tttgcacttt ggacgctgag ttagaattta atttggagtg 480
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<210> 1493
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1493
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 agatttcaca aattacataa aacgttttaa cagcgttcaa atacgttgct taaatttgca 180
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 tcacagactt attacaaaac aaacaaaagc tgaagggtata cttgtcaaaa agttatgggtg 480
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<210> 1494

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1494

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<210> 1495

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1495

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<210> 1496

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1496

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<210> 1497

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1497

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aa 542
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<210> 1498

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1498

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tctggatatt aaaaaccaa ttcctttgga gatagatgaa aacatcaggg acaactttga 180
aaatatttta ccagctgtta aacagttttt aagtaatgaa actatggatc tcattagatg 240
ttatttaaca atcatgaaat actcagaatt tgaagttaat caggaattgc atgagattat 300
agaaaatgat tttgtgaact tactgcaaga accaggaatg actccagaag atctacactc 360
atatttaaca ctggccagat tgtatagttt atcccgaggt ctaaggcatt taacaaaaga 420
ctcctgcaag cagttaaaga tcttgagact aaaagaagat ctagaatcaa agccccaaac 480
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ga 542
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<210> 1499
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 <213> Ctenocephalides felis

<400> 1499
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 attattgcaa atgaccaagg aaacaggact actccttcat atgtcgcgtt taccgatata 180
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 aaaggagaat ccaaaacctt cttccctgaa gaagtcagtt ccatggtgtt gactaaaatg 420
 aaggaaaccg ctgaagctta cttaggcaaa actgtgacca atgctgtcgt tactgncctg 480
 ctacttcaat gactcacacg tcaagccacc aaggattcgg gactatctcg gtctaaatgt 540
 gt 542

<210> 1500
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1500
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 ctaaggatca caaacctaatt gtttggttct ccttgaacgg tgaaagactc ggtactttta 180
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 catattcaac cgatagtagt aaatcctcat cttgtgaatt atatattatt gatgtgcgaa 420
 atgcagatag cagtatgtcc aagctgatcc tattttaagg ataccaattc cagaatctaa 480
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 ca 542

<210> 1501
 <211> 542
 <212> DNA
 <213> Ctenocephalides felis

<400> 1501
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 agaaatattc tcggtggcac agtcttcaga gaagcaatca tctgcaagaa cataccccga 120
 ttggtaacag gatggaatga gcccatagtc atcggcagac acgctcatgc tgatcaatac 180
 aaagccaccg acttcgtggt accaggaaag ggtaaattag aattgacatt taccocccgaa 240

tcgggaagtc caatgagctt caccgtccac acttaccaag gacctggagt cgccatggga 300
atgttcaaca ccgatagttc aattgtagat ttcgctaatt cctcattcca atatgcctta 360
aaccgaaaat tgcccttgta cctatctacc aaaaatacca ttctcaagaa atacgatggg 420
agatttaagg atatattcca ggaaatttat gacaagcaat acaagaaaga atatgaagct 480
gtggaatctg gtacgaacat cgactgatcg atgacatggg cgctacgcaa tgaaatcatc 540
tg 542

<210> 1502

<211> 537

<212> DNA

<213> Ctenocephalides felis

<400> 1502

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attgtttgtg atggcacatg ttttataact gttttgaaaa ttctgagtca cttcttaaaag 120
ttaaaattta attaaagtca gtgtagtggt aataaataaa ttttggtatc aaattaagta 180
ttggatatca tggcgaataa taatgtgata aattttgggg caggaccggc caaactccca 240
gaagaggtga tgcttgaagt gcaagaacaa ttggtgcatt atggtgaaac aaaaatcagt 300
gtaatggaaa tgagccatcg atcaaaagac tacatgaaaa tcaacgatga tacacaaaat 360
gcagttaaag aattattcaa ataccggaca attcaaaata ctatttctgc aaggaggtgg 420
cacaggatgt ttgcagccat accactgaat attttgaaga ctggagttgc agattatgtt 480
gttacagggt cttggtctgc aaaagctgca aagaagcacc aaattggnaa gtaacat 537

<210> 1503

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1503

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gctcctggcc gtgacgacga taggaaactc tttgttggtg gacttagttg ggaaacaact 180
gataaggaat tgcgtgaaca ctttgggtgca tatggagata tcgatagcat taatgttaaa 240
actgacccca gtactgggtcg atcacgagga tttgcattca tcgtgtattc atctcctgaa 300
tccattgata aagttgttgc tgtatctgaa catataatta acaacaagaa agtagatcca 360
aagaaagcca aggcccgcca tggaaaaatt tttgttgag gtttgacgac tgaagtcagc 420
gatgatgata ttaaaaaacta tttcaatcag tttgggacga tcatagaagt tgagatgcca 480
tttgacaaga cgaagaatca acggaaaggt ttctgtttat acttttgaat ctgagcaagt 540
tg 542

<210> 1504

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1504

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cgtctggata ggagtagcag acgtcggagg aatagcagaa gtcttcagga gggctgacga 180
aggaggcagg atcatatitt tcaatatgaa tccaagtatt taccaacgaa catcattctg 240
gagtgtcagt cttggactga caacatgtg gttgtctaata cttgggtgtca gtcaaagttg 300
tatacaaagg ttcctgtctg tgccaacttt aaaggacgct agatgggtcca ttatctactt 360
tacgataggt ttagtcttaa caaatcaat atcctgcttc accggactat tgatgtatgc 420
tcattacaaa gactgtgatc ccttaagtac tgggtgatgtc aaaaaagcag atcagatgtt 480
gectattatg tccacgacgt ggcagggtata taccaggact ataagtttat tcgtactgng 540
tc
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<210> 1505

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1505

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gtatcacttg tgtggcgggt aatacaaatg tggataatgt tgcgataaat gttctacgtg 180
ttctgggtgc tgtaaaggct ttagatatcc ccatttaca aggtgcatcg gaaggctctga 240
ttcctctaga tattccaaat tccacagaat ctgagttcca tgggtgggtgat ggatttggtg 300
atttagagca ctatggaaat gatcctgatt tgagtttaat caaacgagag catgcagtaa 360
attacctaata ttctgcagct aaacagtatg aaaatgaaat tactttttata tttgtggggc 420
tctgacaaat gcagcacttg caattaaaat gtatccagggt tttctagaca aaactaagga 480
tgtgtantaa tgggtggcaa ctataaagcg tgggtaataa aacaagaccg cagaattaat 540
tt
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<210> 1506

<211> 542

<212> DNA

<213> Ctenocephalides felis

<400> 1506

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attatgcgcg ctattttttg cttcgacgct tagcaatgaa actttgtcga aacaccatca 120
agttaagaat cgtcgatttt acatagatta tgataaaaat acattcatga tggatgacaa 180
accattttcga tacatagcag gttcattaca ttatttttcg gtacatccgc aacaatggaa 240
agaccgtttg gaaaagctaa aagcagcagg tttaaatgcc gttgatacat atgttgagtg 300
gtcacttcac aattttgatg aaggaaaata ttggtggggc agcaacgccg atttgagaca 360
atttattaaa actgcacaag aagtaggatt gtatgtaatt ttgagaccag ggccatacat 420
ttgcgctgaa cgtgattttg gaggccaacc ttattggctc ttatccaccc agaaaaagat 480
attaaaccaa ggacactgtt tcgtatatgg aagcagcacg agatggatac aagaatatta 540
aa
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<210> 1507
 <211> 550
 <212> DNA
 <213> Ctenocephalides felis

<400> 1507
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 acaagctgcc gatgaaaaca accgtatgtg caaagtattg gagaaccogc tcacaacaag 180
 atgaagagcg aatggacca ttgaccaacc aattgaagga agcacgtctc ttggctgaag 240
 atgctgatgg taaatctgat gaagtatcac gcaagttggc cttcgttgaa gatgaactg 300
 aagtagctga agaccgtgtt aaggaggtg acagcaagat catggagtgt gaagaagaat 360
 tgaaggttgt aggaaactcc ttgaaatctt tagaagtatc cgaagaaaag gccaaccaaa 420
 gagtagaaga attcaaacgc caattgaaga ctttgccgtc aaacacaagg aaccgaactc 480
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 tggcataaca 550

<210> 1508
 <211> 548
 <212> DNA
 <213> Ctenocephalides felis

<400> 1508
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 tgggtgtatt gtaccagaaa caaacatgca aggccaaccg cagcaacaac aacctgtata 180
 tcaacagAAC tactatgcaa ctgaatatac tccgcctgta gcaaatgaac aaaataattc 240
 acatcaagga caacatatac cacaagcact aaatgggatg cccaaccag ggggtcaggt 300
 tgtacctcct aatatttctg tgccaccccc gcaacaatg ctttatgtac cagaaccagt 360
 tcctacacag gtcataacca ctagtaatca agtgatgccg caacaagtgc ttgccctcaa 420
 tatcctcaag ttctatgcag tttaattcgg gaggacccta catggctcaa ataatacttt 480
 tatccacaat ctttaggtat ctgtcctctc taacatgcac cccacacaat atctccaat 540
 ccctcata 548

<210> 1509
 <211> 405
 <212> DNA
 <213> Ctenocephalides felis

<400> 1509
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 gatatttgtc aaatcaaata tggagatctt ctaccagcgg acggtttatt gatccagagt 180
 aatgatctga aggtggacga atcctccctg acgggagagt ccgacctgt gaagaaaggc 240
 gagtccttcg acccgatggt cctgtcgggg acgcacgtca tggagggcag cggcaaaatg 300

ctggtgacgg ccgtcggcgt caactcgcag gccggcatca tcttcacact gctgggtgct 360
gcagtcgacc aacaggaaca agagatcaaa aaaaaaaaaa aaaaa 405

<210> 1510

<211> 482

<212> DNA

<213> Ctenocephalides felis

<400> 1510

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aaaatgtttc ggagagcgat ttctagtgtc actaaattgc acaaacaac tttaggtaat 120
caaattgtgc aagtcaggaa ccatggtgga actgccatt accgctgtgc ttcacgtcct 180
tcaaaagaaa ttaaacttct cgggtgaactt actggggctt taatgtggtg ctggtgcttg 240
taccatattt ggactgaacc ggatcatatt ttaggagagt ttccctatcc tgatcctagt 300
aaatggacgg atgaagagct tggatccca gccgagtaat gatggatagt taattgatag 360
aaataattaa atattgaaat ttaatgaagt atctggattg tatatggtac tgcaatttgt 420
atatagaaag tgaataagat gtgttaaacg gtagtgaaat ggaaaaaaaa aaaaaaaaaa 480
aa 482

<210> 1511

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1511

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aatgttgcatt ctttaagtcaa tcaccaaag tgcactgaaa cataaccct ccgaagtgtc 180
cacattgggtc aaagctctgc caacggccat ccaaacgcgc tcttactcgc agcaccaaat 240
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aagcaaatg acagttgaag ataaaactaa gaaagtcaaa ggtattctta tgttaatgca 420
gccatgcgat cacatttttg aaattgcttt cccattgcgc agagattcag gaaactacga 480
aatgattcag ggttaccgtg ctcaacacag cacacatcga caccaccaa ggaggttcgc 540
tttcaatggt 550

<210> 1512

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1512

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gaaacaaata atacaaatgt agttgatttc gtacatttta tagcaatctt cacgatggcc 120
gccggtccga tagcagaaag aaatcaagat gccactatit atgttggtgg tttggacgat 180

aaagtctcag aaagtcttat gtgggagcta tttgttcaat ctgggcctgt tgtgaatgtc 240
catatgccaa aagatcgagt aactcaaatg catcaaggat atggatttgt tgaatttctg 300
ggagaagaag atgcagacta tgcaatcaaa attatgaaca tgataaaact ttatggaaaa 360
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tttataggaa atctagacac agaagttgat gaaaaattat tgatgacaca tttctgtttt 480
ggagtaattc ttcaaaccgc aagatatgag ggatccaacc tgnaatcaaa gggtttgcac 540
cataaatttg 550

<210> 1513

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1513

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taatgatatc aagtctatca catatattta cgtaactatct ttaagtgtga cagaattata 120
agtgtgcttt gtttataatt taagaagtga aaatagtaat taaagcagta aaatatggta 180
aatttaggtg acattttccc aaattactgt ttaaaaacat ctattgggtga tattaagttt 240
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gtttgcacca ccgaattagc caggggttgta aaactgatgc cagaatttga gaaacgcaat 360
gtcaaggtaa ttgccttgtc ttgcgataca gtagcttctc atctggaatg gtccaaagat 420
attttgagct atgcaggtga aatgaccaag acattcccat acccaatcat cgacgatagt 480
tcccgcgaat tagcagtaaa cttcgtatga ttgcccgcg agaaggataa ggatggatgc 540
gtgccgccag 550

<210> 1514

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1514

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gtctgcatct cctctggaac gattgtcaaa aacagagacc atcgagttga gggacaaaca 180
tattggaaaa tcctgccaat tgttcttcgc agaggatcct ctgaagattg taagaggcga 240
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gttttgcaga acccctgagt gtctgctacc tcgtcaattc aggatcggag gctaacgatt 480
tggccttgag gtggcaagga ttcacacagg aaacaagatg ttatcacgct gcacagtgcg 540
tagtagatgg 550

<210> 1515

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1515

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tcatttcagt ttggtcattt ctgattggca tacatcattg ttctgcaact gtttttataa 120
gtttttacac atcttccaaa tcctgtgcag ttttttttat ttgggaccac agtatataac 180
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gtctcacagc ttctgaggat atggagtcaa tgcgaaacca ggagcagggt tcgtgaatta 540
tgctcgctta 550

<210> 1516

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1516

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natacctact cgttnatnta aaatgaaaat tctaatttta ttcttaatca ttctttctat 120
gttttacctt gentcctgtg atgagcgcac ggtgaatgga aacgaagtat acattctaac 180
attttattgg caattgtcct ttncaagtaa ttttcaacat ttttgcggtg cancaatgat 240
cagtaagcga tgggcaataa caaccgcttt ttgtgctnaa aaaacgtcta tocatgcagc 300
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gntcgtccct cctcctcggt atgatagccg cgatcaaaat tcaatgtagg ttttaattntg 420
ataacanagg atttcaatga aactagaaga accgcctgcn agctcgtana ggcaaagtgc 480
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taagaaatct 550

<210> 1517

<211> 550

<212> DNA

<213> Ctenocephalides felis

<400> 1517

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gtaaaaaagt aaaatttagt tgcgtgaatt cgtgcagttc acccgaaatg cagtattgtc 180
cggaatatag agcagatccg gttaaggaat cctgtagccc agatcaagtg tgcgctgac 240
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gtgacgaaaa tagtatagga acccaatatt attgcccga aattttgcat atgatccgtt 420
acgtcataat tgcggcctat ggctctgggc acaaaatgct atacagttac atgtctgcc 480
gcctaagggt cttccgtaca ttgggtgata atattgacgt cgatgtatgg ccggaagagg 540

accgtangca

550

<210> 1518

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1518

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gatttgtatt aataatttct tcaatagtag ttaagtatag agaaagatat ataatagaag 180
attttaataa aaatcgattt ttattattag tattaatatt tgtattttct ataataataa 240
taattattag tccaaattta attagaattt tattaggttg agatggatta ggtttagttt 300
cttattgttt agttatttat tatcaaaaata ttaaactcta taatgctggt atattaactg 360
ttttaataaa tcgaattggg gatgtgcttt attaattaga atttcttgga taataaatta 420
tggtagttga aattatttat tttatataaa atatataata aataatttga aataatttaa 480
ttatattttt gatttaattt ctgcaataac taaaagagca caaatccttt tcttcttggt 540
accagctgca 550

<210> 1519

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1519

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gcttttacaa acttaaatg caatgagtaa ttgttgctga atattatgga ttgcatagt 180
gatcggttta ggtgtgttgt attacgaaat aactaaagaa tttccaaagc caaatatacc 240
tctggataca tgggtgggaa ctggaaaatc acaaaaaatt gatacatcaa tgaggccgtt 300
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ctttactcca cctcttgagg gcatcgattt ccaatatggt ttcaatacaa ataccctgaa 420
aaaacttgta gaactttggc gaactcaata caattggcgc gaacgtgaag cattattgaa 480
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gtctccaaaa 550

<210> 1520

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1520

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gactagtcct cggcgtgct ttgctatatt tatcatttgt tcacatgcac agacagtatt 120
atgattacgg atcatacacc ttagacatta caggtccoct tatggttaatt actcagaagg 180

tgaccagtct tgcgttcagc attcacgacg gcctggcacg cgacgagaaa gatttaacga 240
aggaccagaa ttatcatgct gttcgagaa tacctactgc tctagaattc ttcagttaca 300
ccttccattt ccagggtctt atggctggac cagttgtttt ttatagagat tatattgatt 360
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actcaaacag cagaaaagtt gtgcttgaac cttctctata atcattgctt caaaaaagtg 480
atagtcagca caatatgctc ctgtatttat tagttcttcc attgttccaa ttaaagcttg 540
aaagaagatg 550

<210> 1521

<211> 550

<212> DNA

<213> *Ctenocephalides felis*

<400> 1521

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tttgactatt gaagtaggaa ataaagatgg atgggttatt ataaataaac agaattcagg 120
ttactatcgc gtgaactacg ataaggacaa ctggaaaaag cttgcagatg tcttgaaaag 180
tcttgaattt gaaaaaatcc acgtactcaa cagagcccaa attttagacg attctctaaa 240
cttggccaaa actggaaaac ttgattatga attggcctta gacatttttag attacttgca 300
ccacgaattg gattacgtgg cttggaaagc agctgaagaa gatctcaatt ttctcgataa 360
tatgctgagt ggaacaaaag tctaccccaa atttaagaaa tttgtattgc atttagtgaa 420
caaagtttat aataaaatgg gatttgagca acaagatgct atgggcacat tgngtttcac 480
tcgcataaat gctctaacat gggcttgnaa atggccttnc agatgcttgc agtctcatgt 540
cgcttntgct 550

<210> 1522

<211> 172

<212> DNA

<213> *Ctenocephalides felis*

<400> 1522

caggatttca tgggtcttcat gttttaattg gaacttcttt tcttattatt tgtttactac 60
cacttagatt atttcatttt aatcctaaac atcatttttg atttgaagca gcagcttgat 120
attgacattt tgttgatgta gtagattat ttttatatat ttctatttac tg 172

<210> 1523

<211> 673

<212> DNA

<213> *Ctenocephalides felis*

<400> 1523

gttaattccc attaacaogc ggcgtttttc gtttagcaat tcaataaatt acacacttca 60
caatggctga tatggaagat actcatttcg aaactggaga ctctggagct tcagcgacct 120
atcccatgca atgttctgca cttcgaaaaa atggttttgt aatgttaaaa tcccgcctcg 180
tgtaaaattg tagaaatgtc cacttccaaa actggtaaac atggtcatgc taaagttcac 240

atggtcggaa ttgatatttt caacggcaag aaatatgaag atatatgccc atctactcac 300
 aacatggatg tcccacatgt aaaacgtgaa gattatcagc tcactgacat tgatgacggg 360
 tacttaacat tgatggctga caatggagac cttcgagaag atcttaaaat tccagatggc 420
 gaattgggac agcaacttcg taatgatattc gaatctggaa aggagctttt gtgcctgact 480
 aaaatcttgt ggagaagaat gtgtcattgc gatcaaaacc acacagcctt ntaatatgat 540
 tttcacacat tcaaataaaa tctatgagac cattcaactg ttaacagttg caagtggcgt 600
 gtatctagtg tgttgctata aatctgcctc agcttggtan attatgcaaa atcagggttag 660
 tctttgatat ttg 673

<210> 1524

<211> 681

<212> DNA

<213> Ctenocephalides felis

<400> 1524

gaaactgtta ctcttttggg tgcattaaaa gttaggtatc gtgaaagaat aactatactg 60
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 cgaaaatatg gaaatgcaaa tgtttggaaa ttcttcacag acctatttga ttatttacca 180
 cttaccgctt tagttgatgg acaaatattc tgtttgcatg gtggtttgag cccttcaatt 240
 gatactttag atcatattag ggcttttagac cgtttgacag aagttccaca tgaaggctct 300
 atgtgtgac ttttatgggc agatcctgat gaccggggtg gttggggaat ctgccacgt 360
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 atgttgtgac gattttctcg ctcctaatta ttgctatcgt gtggcaccag cacattatgg 540
 aattagatga tgcattaaaa tttattctca atttgaccac tctaacgggt gaacctatgt 600
 ctagaagact cnataactct gagatatcta tcatgtgtaa ttatcatcca gntagtcttc 660
 tttctacacg ncataacnnc t 681

<210> 1525

<211> 676

<212> DNA

<213> Ctenocephalides felis

<400> 1525

gccgntgaag ccgcaccagc tcagctgca gccccgcgcg ccagcgaacg ccaatcatcc 60
 aggggatccc gcaaagccgt caagcgcagt ggatctaacg ttttctccat gttctcaca 120
 aagcaggtag ctgaattcaa agaagccttc caactaattg accacgacaa agatgggtatt 180
 cattggaaaag aacgatctcc gtgccacttt cgacgaattg ggccggtttg tacaagagaa 240
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 cttgttcgcc aaccgcatgt ctggatcagg tggtactgat gatgatgatg ttgtcatcaa 360
 cgccttcaag accttcgaca acgacggcaa aatcgacagt gacaggttac gtcatgccct 420
 catgacctgg ggagataaat tcaactgcaa gaagttgatg acgcctacga ccaaatggca 480
 ttgacgataa aggcttcatt gtaccagaaa gctcatcaaa tgtgactgcg tgcaagaaga 540
 acaaaaagtg gtgaatataa gaaattgaat acttctacat atacatttaa aactgttac 600
 ccattgtggg atatgttaaa atgaactaca tattttgcaa ctataataaa agtatgaaga 660
 tgacanacaa atatgn 676

<210> 1526
 <211> 647
 <212> DNA
 <213> Ctenocephalides felis

<400> 1526
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 atctgctgaa gaatthttacg aagactaatt agthtttaaat ctacagtatg gatgtgttga 120
 ataggcccg ctcacgaattt ggaaatgatg aaacagttga aactttatgg gctatgaaag 180
 ccatggatca tgttattgtc tattttaata tactttgctc tgtagacca aaattttctca 240
 aaatgtgccc ccaagatgaa attatctacc attgttttcg tcaagaattt ccagatatgg 300
 atgttaaagt actagatgaa aattcattaa aaggctatac aggaaaatgc cgatggagag 360
 aatthttgtga acgattcaaa catatagaag attacagttt tggtccttaa tacgcttaga 420
 ttgcacattg gattatagtc cagaaaatac tathtttagtt ccaagagttc agthtttatgc 480
 ctagaatctg tcgaaataaa gaaggcttat gctgatcaga aaaaaatatg ctaatgaagt 540
 gatgttgcca gnatgaaaat gaaatccata gaaatatagc atggtatgtt aagagtcattg 600
 agaaaagggg gtantttattt tatttataat nttatcaaaa aaaaaaaa 647

<210> 1527
 <211> 540
 <212> DNA
 <213> Ctenocephalides felis

<400> 1527
 gaggatgcc aaacagaacc gtgtcgcaat ctacgagcac ctctttaagg agggagttat 60
 ggtggccaag aaggactacc atgcaccaaa acaccagaa ttagagcaaa ttccaaactt 120
 gcaagttatt aaggctttgc agtcgttgaa atctagagga tatgttactg aacaatttgc 180
 atggaggcat ttctactggc atctgacaaa tgaagggtatt gaatacttga ggacatactt 240
 gcacttgccc ccagagatcg tgccctccac tctcaaacgt caaaccaggc ccgaattggc 300
 aaggccaaga ccagctgccc gcccaaggac tgaaggatct cgtccagctg aagacagatc 360
 tgcctaccgt agggcacctg gtgcacctgg tggcgctgac aagaaggctg atgtcggtgc 420
 tggcactgga gacttggaat tcgtggtgga tatggacgtg gcagacctgc cctcaataaa 480
 tttatataag taatttataa taaattcaat aaaacattta tgataaaaaa aaaaaaaaaa 540

<210> 1528
 <211> 671
 <212> DNA
 <213> Ctenocephalides felis

<400> 1528
 catnaacaga tatcccgatg atccaaagca tcaaaatgat ttagcagtaa cactacttat 60
 gggaaacaga ccagctgaag ctttacgcgt tttgcacaaa gttttacaag tttggagaaa 120
 taatggthtt gcattggctc actatggatt tatttataaa actactatga acgacttgga 180
 aagaggtgta aaatatttgc aagaagggtat tgacaccaaa gataatggca caatggatgg 240

aagattcttg tttcacctcg gtgatggatt gcaaagactg ggcagaaatg atgaagctat 300
gaaggtttat gaaaccggag taaaaaataa aatcttccta tctcgatatc aacgttcact 360
ctataatatt gatagattag tgtccagacc ctgggtggact attgaacaaa ctggttatac 420
taaacttttt aatacattaa cttctaattg gaaagctatt cgagatgaag ctttaaccgt 480
gcttgcatgc aaaagcgcaa gagtaaggaa aaattgcaga atcaaaatct gggcctgtta 540
gagccaggca gaaaattaag agatctgggn atggagcagt tgacttatcg gagnetanga 600
taccggttgt ttaccatac agccgctatt tgcntcagan ctactgcctn ggcaataatc 660
actatgaccg n 671

<210> 1529

<211> 667

<212> DNA

<213> Ctenocephalides felis

<400> 1529

aggnnncacg cctatgctca aaagaacttg cgcagatctg ntcgtcgcat taaggaactt 60
nccttccaag ctgaagaaga ccgcaagaac cacgaacgta tgcaagacct tgtagacaaa 120
ttacaacaaa agatcaagac ttacaagagg cagatcgaag aagccgaaga aatcgccgnc 180
ctcaatcttg ccaaattcgc aaggctcaac aagaattgga agaggctgaa gaacgcgctg 240
acttggtgga acaagccgtc agcaaattcc gcgcgaaggg acgtggtgga tccatggcac 300
gaggtggcag cccagtgcgc gcaagaacag cagctcgccc acaatttgac ggaatggctt 360
tcccgtagg ttcgacttga accctgacag cgagttctaa attatttata attaatTTTA 420
aaaaagcgaa cgtggctgct tgacagtaaa cattaatatt ttttaaaaat tattaaaagt 480
aaaaaatatc agctcggttca attgtgctta gtatgacatt tgatctaata taacactgtc 540
agnctaacac attatactat ttatcgccca tacatcaacg tcgctgcata aaatatacag 600
ctccattagc tcctaattct tanttttgna atactttttt gcgatttatc aanggaatta 660
ttatggt 667

<210> 1530

<211> 670

<212> DNA

<213> Ctenocephalides felis

<400> 1530

agcgtgttcg ccgaggagga acgcgcacgt tttgacacat ttcttttagtt ttttaagataa 60
aatccaatcc ttcccaacaa aaaattagtt ttaagcgac atttatgttt agtgacacga 120
aggcggttgt tataaaatta gtgtttacgt gatgtctaaa caacagtaca cagttgacgg 180
tgatctattc ggtacgcctc acaggaaaaa accagtgcct tggaatgagt tcttgtacaa 240
cagcgaagag ggaacagtct taggaaggac aggactgagt tgggcgaaaa tcggtatatt 300
ctacacaata ttctacggag tattggcagc attagtggca atatgcatgt ggggtgttctt 360
ccagacgtta gatcctcgta taccaaaatg gcaattagac gaaagtatca taggaacgaa 420
tccaggcctt ggcttcaggc ctttgccgcc gatgagaaca tagaaagcac gctcatctgg 480
tacaagggtta ccgatttaga caactacagt cgatggncaa atccttttaga gttcttcaat 540
ttacaaaact ccggatacct caccgagtaa acattcagtg tgctccactc gccgccccaa 600
gttggtngc gngacgcaag ttggtcctgt cganaaacat ttatatacag acngcggtga 660
tttgagtgan 670

<210> 1531
 <211> 558
 <212> DNA
 <213> Ctenocephalides felis

<400> 1531
 aantngtcga ggtcacgaat ctgaaaatga gtngncaccn attcagctga tctctgccac 60
 agcttaccag ctcaaaaaac ccaatcaaca aatggtgata ccaataactg nttggattgg 120
 tatggagcaa gcattcattg gtgctgattt cacacaggcc tatgtatcct gngcttttgg 180
 gtattaagtc aaattggata ccgtcatgat ctgcttcgga gtagtcaacg caatttgntc 240
 agtcgttttt ggttctataa tgaaattcat cggtcgccaa attatcatca ctttcggttt 300
 cttcctgcac atgggcctga tgattggatt attattctgg agaccaagcc ctgatgataa 360
 aatgatgttc tttgtcatgg ctggactttg gggagttggc gatgcagntt ggcagacaca 420
 aatcaatggc ctatacggaa ctctgtcagg cggacnaaag aggcagcttt cttcaactac 480
 cgctgtggga aagcttaagg ttgtcatcgt tacgctacag cacacacttg tgcccggcat 540
 gaanttacgt caattgac 558

<210> 1532
 <211> 660
 <212> DNA
 <213> Ctenocephalides felis

<400> 1532
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 taacacacaa aaattaatca taaatgtctg ataataattg gtagtatact tgtacagtaa 120
 attctttatt ttctttttcc caatcttttt ctaaaagcga gtgtgggtcat actgctgtgg 180
 taattcgtca ccgagaagcg gatgaagttt atcctccatc attagtgaag gctttgcttg 240
 tcagaagaga gaggagtgtt ggttgccggt gtttattgta gttttaattt aattttaaac 300
 taagttatgc gtatgaccca agacatggac gatgatgaaa agggaaagct tttcgtcgga 360
 gggctatcat gggagactac tcaggagaac ctgcagaggt tcttctcgag gtacggcgaa 420
 gtgatcgatt gcgtcgcatg aagaacagcg agtcggcagg tcgcgcggct tcggcttcgt 480
 cacatttgnc gatccctcga acgtcacgct gtctgcagaa tggccgactc cctggcggaa 540
 gacttagatc aaacctgcac cccgccctc agaccaaacg ggcgagctcc caagttcttg 600
 cggctgcac acgngngaac cgctagtgtc tcgcntacga aagttgagtg cnttgcnacg 660

<210> 1533
 <211> 669
 <212> DNA
 <213> Ctenocephalides felis

<400> 1533
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 cagtacatga atttcatgtg tggcagttag ctggagatcg tatcattgcc tctgctcaca 120
 taaggtgtag aaatttatca gagtacatga aaattgcaga aagagttaag gaattctttc 180

ataatgaggg aattcattct actacaatac aaccagaatt tgtagaacta agaagtttat 240
 tagagccttc acgagatatg gagcaacat gtgctctaga ttgcccaatt actgatgtac 300
 catgtgctca agctacttgt tgtggaactt ccaaacccaga tagagatacc ccatcaccag 360
 cggcctcacc ttttatgtgc aggcaacgag gagcaggtca acgagttcaa ggtggttctt 420
 caggtccaaa cactggtgat ctagaaagt gtcatgtta ggtggacatc caaccactca 480
 gttgttgcaa ttgcctctgg tctaattgtg ctgtccaaat caaataaaga atcttgtgct 540
 gcacacatta tagcgcaaag tccctgccat cagttgctga tattctatat gcaaatttn 600
 ataagaatag atggaattat gcagggagga nangtcatat gataattatt atcattatgt 660
 ggactggat 669

<210> 1534

<211> 546

<212> DNA

<213> Ctenocephalides felis

<400> 1534

cttgtnttct gaagcaataa tottggttaa tgctttgggt tgtagcaaag atcctgatat 60
 ttttaaggagc tacttgaaa aaactgtaga acctgattcg aaaatcagag atcaagataa 120
 attccgtgct atgtattctg taatcagaca aggaagtgat ggagtgacaa ttgcattaga 180
 atttatgcgt aataaattgc caaaaatgat tgaacaatat acaagcttga atgcgctcaa 240
 aaaagtttct gaaactgtag ggcgagcaat ttcaaacgaa aaacaagaag aactgcttcg 300
 tgaaattatt gctaaatata attctacatt ttcggattcc ctaatgcaag gtgcaaaaaac 360
 tgcttttagat gccatggaag ataataaaac ttggagagat aaaaatttag ctactgtgac 420
 aaggtgggtt gaaaaacagc ctgaagttta tctaataat gcaacaaaac tagtccaaag 480
 tatttattat tacttgattg tattcaatat tgattatatt taatatatac atcagtnctn 540
 gaaaaa 546

<210> 1535

<211> 662

<212> DNA

<213> Ctenocephalides felis

<400> 1535

aagccgtggt agtttcgctg tatgaggaac ctattcagcc tcaacaagct gcttctgtcg 60
 tggagaaact tgggtgactac ctcataactt gcggctacta aatgtgaaac actggagtgg 120
 ccccttatta atttttaaga aaactataat aattataatt acgattaatg aataaattta 180
 aacaatgaag accggccagc aaaaaggagc agaatttttt tctcatgcct cctgcaatgc 240
 agtaaaatat tttgtgccat tttgtgcct ttgttcccg tgaccttttt ttctcagaa 300
 gggacacctg gagtgtactg gcaaaatcga ggacattagt ttaaactatt gtattataaa 360
 accgtgcgga cggcaaaatg aataaaaaat ctactacga ttaaatttgt attaatttcg 420
 atgtgaggtt atcgacttgt ggatttaaat atactttctc ctttaataaa actcgtgctt 480
 ttgcaattta tgatttgcta ttattagcta ttgatgnata aatctgtatg aattttgatc 540
 cctcaataaa gaatttatat agtgactagc tctcagtttg aatttattat atcgtattgt 600
 gcaaaagccga ccatagttgc gactgactcn cgttctnttg tgctgacttg tattgctatn 660
 ct 662

<210> 1536
<211> 668
<212> DNA
<213> Ctenocephalides felis

<400> 1536
gaaatattta cctacattag ctttgccaga tggatcccat aattttacgg aagattctgt 60
attttttcat ttaccaggat tacaaaagga tgaacagact atttttggag tatcatgtta 120
tagacaatta ccagtgaggaga aattagttaa tataccttct gatgtaactc gcagcactgt 180
tcaaaaatca gtttgtgttc taagcacctt acctttatat ggtcacattg agataaaact 240
tgcattaata gcacatgcat tttttgaaca aggcgacttc agccaaacca agatattgca 300
ggatgcatat cataatatga accaatgttt tggctcaaat gaaatttttag aaaaaataac 360
tataggatta agtgtcagag atttagtgtt gaggtggcgt cataaaatat tagttttatt 420
taaattaata ttattggaaa aaaagggtgc atatttggtt caccagtaag gccattatgt 480
ctagccctat taacttatta tctcttcac caatattata gacaaaggat tattgagtcg 540
gcaatcagga cacttntata aaagaaaatt ctagtatatg caatcagata tatcatgcgg 600
aaacagaatt aatatctctg atctaataca aatatgaatg tggaaagttt tgagatatct 660
aaatgctg 668

<210> 1537
<211> 620
<212> DNA
<213> Ctenocephalides felis

<400> 1537
atcaacttgg attttgtcgg ttaattccga aatcgaaaaa gtttttaagt gcaaaacatt 60
taactgtgac atcagtttgt aatgtatctg ggaaggaaat gagatctgta aatccgattg 120
aaaggtttcc tccttatgac tataagaaga aaggatacgg atttatcaat gcgttttttg 180
attacacaac taagagattc aatgataaca caaaggttat tacagtggaa ggtccaccag 240
ctgttggtgcaa aactgcattt gctaaagctt tggccgaaga tttagatatg aaatactttc 300
cagctgttac tatggatcac tactatatta atgaatatgg gtatgatctc agacaacttg 360
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ataatagaaa tgtagcaaca atgcaaattg tgttatatat gaaaaaatat gaacaatatc 480
ttgcggtctc tgccatttat taaatctgga caaggagtta ttttagagag acttgtaactc 540
tgtttgtttt ctagaacctg gctagctggt tgttcgcagg actcgtcgat atttgaatag 600
agcacacatc cagatgagca 620

<210> 1538
<211> 557
<212> DNA
<213> Ctenocephalides felis

<400> 1538
gtcattcact ttttacgagt tottttagtgt cctaatttat taataagtat cagaatgggtg 60
ccgaaaacaa aagtatttgt tggaagcttg ccgccaggct ccaagcctga agaattacgt 120

cgtttggttcg aagcttacgg tgttgtaaca gaatgtgata ttatgaatcg ttgtggcttt 180
gtacatatgc agaccgaaga gatggctttt agcgcgattc aagcgttgaa taatactaca 240
tttaaatggg ccacgataag tgtcgaaagg ggccgcacatca aggaacgcgg atcagggtgg 300
ggtcgtggag gcggtggccg cggcggtcga ggatttgag gacgaggagg tggatgaat 360
cgtagtggg gaggacctg gggatgcgt aatgggtggg gccccatgg aggtggcatg 420
cgtcgtggag gcggtggccc aggacccatg cgtgggtggg gccgtgacat gaatcgtgga 480
caccctattc tngtgatggg ggcgtggagg agatttggg gccgagggctg gacccatgcc 540
aatggttgn cgcgcga 557

<210> 1539

<211> 556

<212> DNA

<213> Ctenocephalides felis

<400> 1539

gcgtgcctta cctccgagct gttgttactt gttcattttc gccggtttgc gttcgaggaa 60
atthttgtttt cggacgcacg tgagcggtaa cgagtcctgc aaagatgtat ataaaattct 120
gtttattggc attcgtggcg gctgaactaa tgtaaatgtt agttgaggcc aatgttattc 180
ctggtgaaga agaaaagagc gatggattcg agctgctcat tctgcataac aacgacatgc 240
acgctcgggt cgagcaaacg gcggcacgca gcggccctg cgtagacgga gaacgatgtt 300
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gcggccctcc tgtgctgtac ttgaacgctg gcgatcatat caaggaactc cttggtacac 420
gctttacaag tggaacatat cttatatgat gtaaacgaac tcgctccaga tgccatgtcg 480
tggaataac gagttcgaca cgggtgtcca ggttgctcca tttctggaaa atgtgaaatt 540
tcagtgtagc tctacc 556

<210> 1540

<211> 620

<212> DNA

<213> Ctenocephalides felis

<400> 1540

cctacttaca aattaacgta cttcgacctc aaaggaatag gagagccttt gagacttcta 60
ctaagctatg ggaacataaa attcgaagat gtccgagtgt catttgaaga atggcctgca 120
cttaaaccac agatgccatt tgggtgaatg ccggtattgg aggtcgacgg aaaggaactg 180
caccagagtt tggcactttc gcgctatttg ggaaaacaat tcgggctcgg gggcaaaaat 240
ctaattggagg agttggaaat tgactcaata gtcgataccc tgaacgattt cagatataaa 300
ttgacgatgg cctattggga acaagatgcg gctgtaaagg agaaaaaat gaaagaagta 360
cacgatacac tcatccatt ttatacagaa aaacttgata aaatagcgaa ggctaataat 420
ggcatttagc tcttggaaga ctaacttggg ccgctttgtt tcgcgaggtt atcgaatata 480
tgagtttcat atctggaaca gatttccttg gaaattgcag gattcaagag tgctttaata 540
tgtgcaattg ccgacgtgaa ggaatggctg caagaggcaa aactgttgta tgtcatttgg 600
gaatttaaat aacattatac 620

<210> 1541

<211> 620
 <212> DNA
 <213> Ctenocephalides felis

<400> 1541
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 ttgtacgccca gtgtgtgtaa aggtctcttc agtcgacgac agaggataga agtcagagga 120
 catttataat acgcagtttt taagtttttt ctggtgaatt tgaatatatt tgaagaaaat 180
 gaagagggttt ttggttgctt tggcggtttt ggtggtcgtt gctgaggcta agctgtcatg 240
 ttcgagtaca aaagcctcga tccccgaaga atggatcgac atgacagccc agtgcacgag 300
 gagcatgagg aaccagatcc aagaagaact gagcgcttcg atgcaatact tggccatggg 360
 ggcgcatctc tcaagagaca ctgtcaacag gccaggattt gctgagatgt tcttcaaact 420
 ggcaagcgaa gagagggaac atgccaatgaa actcatgtct tacttgatga tgagaggaga 480
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 tgagtgcctt gaagatctct gaatggagct tcgtccagaa ataacatgtg acaaagcttg 600
 cagacatatg gactatgata 620

<210> 1542
 <211> 591
 <212> DNA
 <213> Ctenocephalides felis

<400> 1542
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 gcaccagctc cagctgcagc ccccgccgcc agcgaacgcc aatcatccag gggatccgc 120
 aaagccgtca agcgagcgg atctaactgt ttctccatgt tctcacaaaa gcaggtagct 180
 gaattcaaag aagccttcca gctaattgac cagcagaaag atggtatcat tggaaagaac 240
 gatcttcgtg ccactttcga cgaattgggc cgtttggtac aagagaaaga actcgacgac 300
 atgatcggtg aggcctcagg accaatcaac ttcacccaat tgttgacctt gttcgccaac 360
 cgcattgtct gatcagggtg tactgatgat gatgatgttg tcatcaacgc cttcaagacc 420
 ttcgacaacg acggcaaaat cgacagtgc aggttacgtc atgccctcat gactggggag 480
 ataaattcac tgccaagaag tgtgacgctc gaccaatggt catgccataa gcttcattgt 540
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<210> 1543
 <211> 554
 <212> DNA
 <213> Ctenocephalides felis

<400> 1543
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 atcgagcag tgcaagtggg gatgagtcta gctgctattg gattggtaga gaaatttggg 180
 cggaaaactt tgctaattgat cagttccacg gttatgggaa tctgtttggc agctttgggg 240
 tattacttca ggtgcaaac atcaggcgaa gacgtcacct ctctgggctg gcttcctctg 300
 tctagcctgg ttttgttcat cgtggccttt tgcatagcct atgggcccac tccctggatg 360

gtcatgggtg agattttctc tgcgacgtta aaggagctgc ttgcagccta acagtcacgc 420
cagctgggtcc ctgcgtctttc tggctactaa agtattcccc acatgagggg gacttttagga 480
ggagatgtac cttttggatc ttcaactttca tgatatcgta cactgttttcg tgtcttctgg 540
tgccgaacaa agat 554

<210> 1544

<211> 604

<212> DNA

<213> Ctenocephalides felis

<400> 1544

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gaatgtgggt gagcaaagtg ccgaaacaaa agctattgcc gaagaagatg atgttaagga 180
tgcattgggga tgctgattca agcagtgaag aggaaagcac aactgaaaca ccagcagtaa 240
ctgcaaagtc tgaaacaaaa gtggatcaat ctgcagaaag taaaaaggaa gaaacttctt 300
cagaagaaga gtctgaagaa gaaagtgatt ctgagtcaga atctgaaagt agcgaagaca 360
gtgataatag aactgatgca gaaaagaaac gagaaaaggc tctccagaga atacaaaaac 420
gcagaattga tgcagaacag aataaatcat tagacaaact gagagctgcg gtggttgtgt 480
gttgggacat gtagatctgg aaaacaaaaa ttttgcaata ctcnacaaat gtcaagatgg 540
tgaantgtgg tttctcacca aatgtgctca aatgtcatag aaacataagg acagtaaatt 600
gtaa 604

<210> 1545

<211> 608

<212> DNA

<213> Ctenocephalides felis

<400> 1545

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ttttggccaa ggtatcccg ccactgactg tggcagtgcg aacaacatcc caggctgcaa 120
catgccctgc tcctacaaag gtagaagaag ccgatagtgc tgaaagagat ttggtcaact 180
tccaaggcc aacacgtttg gaacattcac cttaaagttcg ctttggattc attccagact 240
catggtttga atttttctat gagaagaccg gtgttactgg accttacatg tttggaactg 300
gtttaattac ttacttatgt tcaaaggaaa tttacgttat ggagcatgaa ttctatactg 360
gtatttcatt ggggtattatc tgtctctatg ccactaaaaa gttgggtcca catattgcaa 420
aatacttggg caaagaagtt gatgcctatg ccgatgaatg gaattcaggt cgtgtagaag 480
aagttaaaag ttaccaagat gccattgaag gagaaaagtt ggacaatgga gactgaaggc 540
aacttatgtt gatggatgca aacgtgaaat gtgcttgac ttgaacacta caggaccgcc 600
tgaaggta 608

<210> 1546

<211> 595

<212> DNA

<213> Ctenocephalides felis

<400> 1546

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gattgtatca gtgatagcca gtgatataac aatatttgtt taaaaaatga tgacgccgac 120
cgaaattagc aatttgaaaa aagtgaagtt ggagaatttt tgggacgagg tcgatcccaa 180
aaacatatcg cctgagtatc caaaaaatga aatccaggat tttttcagcg gcggaagcgt 240
cttcataacc ggcggtaccg gatTTTTTggg aaaattattg atagaaaaaa tactgaggac 300
atgtcccgat ttgtcaagaa tctacatctt ggtccgagac aaaaaaggga aagatgcaaa 360
aaatagatta aaagatatgt taaatgatgt ggtattccag cgattaaaga aagagagtcc 420
gtggcccaac aaaaattgga ggttgttatg gagatgttgg caagcccgat ttagggttgc 480
ggaagtgata gaaaaatata caggatatgc aacagttata ttcacgtaca ncctgcaatt 540
tcacgaccat aaaaactcag ttgcataatg taagggcant agagtgttga actgc 595

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<210> 1547

<211> 595

<212> DNA

<213> *Ctenocephalides felis*

<400> 1547

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ggtacattcc taatatctgg attgtttttg ccatcgtttt atgggaagga cttctaggag 180
gtggtgctta tgtcaacacc ttctacagga tgagccatga gattccaatg gaaaaacaga 240
agttctctat gtcaattact gctattgtct atagtctggg aatagccttg gctggatgga 300
tagctatgcc aacacataat gccttgtgtg ctttgcctaa accaacttaa gtgaataaaa 360
tttgacaaa tccaacttta ggtggatgaa attaaagttt agttgtttgc gagtgcaagt 420
gtagataatt gaaccagtga aatagttttt aacgtaaaat ttctatcaga aaattatcat 480
tttaaggaac attgtggata ataaaacctt agcttaaatt aaataccac ttataaacta 540
atatcgagta ttctctatta aatcaatcga accgtcatgt gaatcgaata tttga 595

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<210> 1548

<211> 653

<212> DNA

<213> *Ctenocephalides felis*

<400> 1548

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gacgggtcag aatacagtgg ctcttatgca aaaacgatca cgaaagagga aatccaagaa 120
tggcatagac caagaataga agctttaata aacgcagggt tagacggatt agcaattgaa 180
actattccat gtcagttgga agctgaagcc ctagtgtgaac taatagttaa tgagtatccc 240
ggcacaaaag catggcttag ttttcaatgt caggatgaat ctctgtctcg ccacggcgag 300
ttattccgcg acgcggcctt gagctgctgg gagctggcaa gggagtccca atgtttactc 360
gctgttgggg tcaattgcgt tcatcccaaa tacgocgtcg gtctctgcaa atccctcaat 420
agggatcaga tgcccaaat accgtcgtgt tatccacag tggcgaaaat tacaccgcc 480
gaagggtgga aagataagac cgtgtgttct gtccaagata cgtcagttct ggttggatca 540
ggaccctttt anggaggatg tgcgtctgtg caggcataga atntagaaat tggatcgtgg 600

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atataacgga ttaataatTT aataaataat tnttacgaat ttntataatg tgg 653

<210> 1549

<211> 553

<212> DNA

<213> Ctenocephalides felis

<400> 1549

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tagacttatt tgaagacact ccagctaaca aagtgaatat tgcaaatctc gctgcaggaa 120
aaaaagttgt cttattcgct gttcctggcg ccttcactcc aggatgttct aagactcatg 180
tacctggcta tgttgcaaag gctgaagaat taaaaaagag tggaattgct gaaattcttt 240
gcgtctctgt taatgatcct tttgttatga gtgcttgggg taaggatcag cagagcaatg 300
gaaaggttaag aatgcttgca gatccaagt gtacattcac aaaagaactt ggattgggag 360
ttgaattgcg cccttaggag gtttacgttc taagagatct ctatggtgat agacaatggt 420
gtcgtatcag aattgaatgt agaaccagat ggtctggact ttctgttcc ttagctgaca 480
aacttaaagt ttagaatata gtaattattg aaataagagt aataaatata atgtaatatt 540
aaaaaaaaaaa aaa 553

<210> 1550

<211> 661

<212> DNA

<213> Ctenocephalides felis

<400> 1550

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gggcagaccg tcgcgcgttg tgaacccgga cgacgatccc gccggcgaaa atgttgctag 180
ctacattcca cagcttggt cgcataaacc ctgatttttg ggggtgtgagc gtctgcacca 240
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gtaaacctgt gacatatgcc atagcattgg aaaagctagg ccaggcgacg gttcatcaat 360
atgtcgttca agaaccaagt ggtagaaact ttaatgaact cgtactagat tataataaaa 420
gaccgcataa tcctatgata aacgctggag cgatattggt tgcgtattg aaaacttagt 480
caaacctgag atgactctac tgagaagttc gactatatga ccacatatTT aagagattgg 540
tggtggaaga gtctcggtc aacaaccggg gtcttgcgga cccgaagccg cgatagaata 600
cctttggttt actgaggaac cagtctnccg gtaactaat acggatctgc ttatttatgt 660
g 661

<210> 1551

<211> 671

<212> DNA

<213> Ctenocephalides felis

<400> 1551

gcattattag ctaacgatct tcataatata tttgtcaaca gtaatctaac gcatttgaga 60

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ttacctagtc tgcgagattt gcatttgggt gataattatt tatcagagat agactttaac 180
tttttgtgtc ttaagaattt acggtttctt gatttggaaac ggaataaaat cgaatacttc 240
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tggtgtgtcc gaactaatgt taccgtcagg aacaaggagt ctttacggtg tcatcgcgcc 420
caaaagcatg gcggggaagc attgatoagc ctatccgtcg ataaatgtcg aaaagctcaa 480
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catttttctg gactgtcgcg tctggctaca tgagcagaga taagttgaaa tagcattact 600
ctgtgataga accgttttaa aagtcaattn ccgatccgaa catgacagaa gttatatagg 660
aattgtgcaa t 671

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<210> 1552

<211> 611

<212> DNA

<213> Ctenocephalides felis

<400> 1552

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atagtccga gataacagtt gtgaagaaaa cgctgaaaca gaaaataata catgaacttc 180
tacattacta ccattggtttt cgacttcttt tcatcgattt aaatgtatcc agaaaattaa 240
tatggcgagt tctgaatgga aaccagttga ccaggaggga acatagattg ctagtggaga 300
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aattactgct gcagttgcc ttaactatt cccaggaatg ttgcatcgac cttcaaactg 420
cccagagaga gaggataaat tgaacaaaag tttgaaggta aaactagaga tggctaaatt 480
tctgacggaa acattagacg acatgactct acacacaaag atcacagatc agaattggct 540
aaagagtcca attgggttac gaaatgagac agctgcctca gcnntacgaa gaatcatgaa 600
attcaaaatg t 611

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<210> 1553

<211> 566

<212> DNA

<213> Ctenocephalides felis

<400> 1553

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atgatattga cttaaatcca tacaatgata aacaagccga agacagatgc cacagaatgg 180
gccaaaagcg gccagtaact atttatagat taattagtaa aggaactatt gaagagggta 240
tgcttcaagt tgctagagaa aaacttaatt tggagagaga agtcaccact aacacggaga 300
atgatcctca agaagtaaaa aatgttgtgc gattactcac actagcgctg ggcgtcgatt 360
caaataaagc tgccaatctt ttaactccat cgcgagaaaa tcggaatcct aattgcaaaa 420
gocgctatta tttagcacac attatgaatt ttgatctttt aaatttatta gttaattgat 480
gattatttaa aaatataggt atttttatat aatttatgaa ttactgcagc gccaaataaaa 540
tccgtttact ctaaaaaaaaa aaaaaa 566

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<210> 1554
 <211> 585
 <212> DNA
 <213> Ctenocephalides felis

<400> 1554
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 caaggctaac gccgaggccc agaagaacat caagcgttac caacaacaac ttaaggatgt 180
 acaaaccgcc ttgaggaaga acaacgtgca cgtgatgatg cccgtgaaca acttggcatt 240
 tctgaacgcc gtgccaatgc tctccaaaac gaattggaag aatcccgtac cttattggag 300
 caagccgaca gaggccgccg ccaagccgaa caagaattgg gagatgctca cgagcaattg 360
 aacgaacttt ccgcacaaaa cgcttcagta tctgctgcaa gaggaaattg gaatccgaat 420
 tgcaaacctt gcattctgac ttggacgaac tctcaatgaa gccaagactc agaagaaaaa 480
 gcaagaaggc atggttgacg cagctagggtt ggtgtgaact ccgcctgaca agacntgccc 540
 aaaccaaga gaactcagaa aggtcttgaa cacaaataag aattg 585

<210> 1555
 <211> 612
 <212> DNA
 <213> Ctenocephalides felis

<400> 1555
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 tgcacattaa caaaaataag cagaacaact attaaaaata tgttttccat gtcaaacctt 120
 ttctaaaaac cattcaatgc atagaaatgt aatttttaaa atcaatagta tgatttttta 180
 aaatatattg ttttatacca ggagtggact actgaatttc tgcaagtgtt ctatggctct 240
 caatgatcta ggggtacaaag ctgttggtat acgaatagac tctggtgatt tagcatatct 300
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 tgcaagactc atgataattg catcaaatga tatcaatgaa gacacaatac tcagtctcaa 420
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 gcaccagcac ttgttgtgtc tacaaaatgg tagaaataaa tggacacctc gaataaactc 540
 agccagatgt gctaagtaca tgccagtcgn agatgcctat cgttatatgg nagatggcat 600
 gccctatgct gc 612

<210> 1556
 <211> 613
 <212> DNA
 <213> Ctenocephalides felis

<400> 1556
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 caciaagatt ggcaacgttt tgtgaaaact tggtttaacc agcccgaag gaaaattcga 120
 agacgtcaaa acaggattaa aaaagctcgt gccttggttc ctcgtcctgc tgctgggccc 180

ctcagaccaa ttgtgcattg cccacagtg cgataccaca ctaaggttcg agctggcaga 240
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 ggcattgcat tagatgttag acgtcgtaat aaatctgtag aatctttaca acagaatata 360
 caaagattaa aggaatacag atctaaattg atcttggtcc caagagggtg aaagaaattg 420
 cataaggggtg aagcaactga agaggaatgc aagggttgc ctcaattaga aggcgtcgtg 480
 atgccaatga aacaaacttc agttaaatct aaagtcgtgt cattctgaag atgaaaagaa 540
 attctagctt tcccacttaa gaaaggctcg ctgtcagcgc tgggtggttc gtgaaaagga 600
 gtaaagatca ntg 613

<210> 1557

<211> 659

<212> DNA

<213> Ctenocephalides felis

<400> 1557

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 aatgaaatta gttagggttt ttatgaaatt atcacacgaa acagtgtcga tagaattgaa 180
 aaatggaact caagttaaag gaacaataac tggcgtggat gttgccatga atacgcattt 240
 gaaagctgtc aaaatgacta ttaaagatcg agatccagta tttcttgata ctataagttt 300
 gagagggaat aatattaggt actatattct cccagatagt ttaccattgg agaccctttt 360
 gatagatgat acaoccaaag ccaaagctag aaagaaggaa gcagctcgag gtggaataacg 420
 aggaaggggt cgtggctcgtg gtggcccaga ggcggtcgtg gaggtggtag gggacgtgga 480
 cgaagataat aatatttttg attgtaagct attataatca ttgaacattg gtcacatagga 540
 aggctatcaa tttgatgtat aatgtatttg atcaacaaga atttangttg atccattttt 600
 aaccaatttt nttgtggcta atcagtttga gtcgatcata ttctgatgtt atatgaaga 659

<210> 1558

<211> 564

<212> DNA

<213> Ctenocephalides felis

<400> 1558

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 gattcgaaag ctaaagggat tcaaacttgt agcaatgaaa ttcattgtggc catcagagga 180
 gctcttgaag aaacactatg ccgatntttc ttgccagacc ttnttttctt ggactagtta 240
 aatacatgag ctctggccct gttgtcccca tggctctgga aggcactaat gttgnaaaaa 300
 ctggtccgtg ttatgttagg agctacaaat ccagctgact cgaccccagg aaccatccga 360
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 ccaagaagga aattgcttat ggtcactgaa aaggaagtaa tctctgaccc cagctcatga 480
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 tgtgaataaa aaaaanaaaa aaaa 564

<210> 1559

<211> 617
 <212> DNA
 <213> Ctenocephalides felis

<400> 1559
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 atcgttggag gcaaagacac cacaattcaa gaacatcctt accaagtatc aattttgtac 120
 aatgatgaat atcacagctg tggaggttct ttgatttctg aaaaatgggt ttgacagcc 180
 gggcattgca tcgattcttt caaattctac atccgtgtgg gaagttctct tgaaggcgaa 240
 ggtggagctg tgcacagcgc tctaaaacaa tatcgacatg aaaagtttga tgcaaaaact 300
 gtagattatg attatggatt aattgagtta gacacaccgg tacaacttag tgaaaatgta 360
 aaattagtca aattggctga acctgggtgt gaacttgaag aaggaactct actaaatgtc 420
 acgggatggg gtagccgcga tccagcgcac tctcaaatag taactgacca tatgtatccc 480
 aagaagttgc aaaaatacat tcagacaggt gatctcccat atatgttctg tntggtaa 540
 gcangannga agactgcatg gnacttggtg gcngtgatca atggatccat tggatgggtc 600
 tgagcttgtg gcctacc 617

<210> 1560
 <211> 659
 <212> DNA
 <213> Ctenocephalides felis

<400> 1560
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 ccacagttga ttgctcagga aaaggaactt gtgtatgtgg tgtttgtgaa tgcgaacagc 180
 gtgccaatat cgaagaacaa atctccggca aatattgcga atgcgataac ttctcctgcg 240
 accgtcataa tggatattta tgctctggtc cagaacatgg tgtttgtgtc tgcggtcagt 300
 gcgactgtct gcccggtctg accggccctg cttgcgattg tagagatacc aatgctacat 360
 gtatcgctcc aggatccaca ggcgaagaaa tgtgctctgg acacggagtt tgtgaatgcg 420
 gagtttgcaa gtgtgatgtt gctgaggatg gcagatatc aggaagatct gcgagaagtg 480
 tctacttgt cagccgtgca ggagttcaaa gaatgtgtta tgtgtcaaat gtataaaact 540
 ggccctcaca gaagagaatg cggaattga catctccatc gtcaagatna gtgaactgtg 600
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<210> 1561
 <211> 662
 <212> DNA
 <213> Ctenocephalides felis

<400> 1561
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 gctgctccag ttggcaaatt acgtttcagg cctccacaaa aaccagaatc atggagtggg 180
 gttcgtcaag ccactgaaca aggcagtga tgttcacga aacatatgct tttgcaacac 240
 cctataggaa ccgaagattg tctctttgca aatgtctata ttcccaaac tgatgccaaa 300

aagcctcttc ctgtcatggt ttgggttcat ggaggaggtt ttgtcatggg atcaggaaat 360
 actgacatgt atggtcctga ttatctcatg gactacgatg ttatcctggc accttcaact 420
 atcgtctcgg agttctggga tttttgaatt tagatttggg agaattgtctg gaaatgtcgg 480
 actaatggat caggttgctg ctctcaaatt gcaaaacaaa acattgcaag tttgggtggtg 540
 atcaaacaca ttctattttg gagaatctgt gtggtgcagc tacattatta gttgctgac 600
 tacagagggt gtccaaaagc atgncaagtg aggcttaaatt catgcttcac gcnactaag 660
 an 662

<210> 1562

<211> 655

<212> DNA

<213> Ctenocephalides felis

<400> 1562

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 acaactggat ctatgatgcc gactgctgct gctggtgccg cagctgccgc cacagctaaa 180
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 cgcaggtgtc gtcgtacctc aagtcataca gcctccagga attgtgacgc cgacatcgca 420
 accagttata attccagtat cagtattacc taattgtgaa tcttctccga cgatgatata 480
 aacaagctca cctgcacaca gccgatcaca atactacaca gaacaatgaa gccagaatgg 540
 ccaagaacnc acaagagact tnaaaaaact atagatgaac tgacccaact tacagacaag 600
 aacatgtgct aaggnaaagn nncgcctatn tcaagntatg aagangatca ctnta 655

<210> 1563

<211> 651

<212> DNA

<213> Ctenocephalides felis

<400> 1563

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 gctgcttcag caattccctt tattattttc accgtccttt ggggtatagt ggggtgctgt 120
 ttacctttta tagtgccaaa aggaccaaac agggggattg tgcaagtcgt tttgatattg 180
 acagcagctt gttgctggct cttctggctc tgctgttaca tggcccaaatt gaacccccta 240
 ataggaccca aactacacca gaacacgatt ttattgatgg caagagaatg gggaaatcca 300
 atcagcgatt tgtaatttag tcaaccaaca ttctgaata tcttctgata taaaatttca 360
 tactgtgtga tgatgataaa tgaagataat atgatttaca tttcacataa atgtgtacat 420
 ataattttta gaacaagtta ttaatttgct tgattgtata tagatatatt atgagaacta 480
 ttcgtttag caaatatatg tgtcctggga gaaaaatnnn nnnnnnnnnn nntnnttnt 540
 ntntnnnnnn tggggggggc cggcccatc cctaagggg ggttttaata ncggcgggtt 600
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<210> 1564

<211> 664
 <212> DNA
 <213> Ctenocephalides felis

<400> 1564
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 ccctgtgata caggatgtga ttttccatt caaaatttao catacggcgt attttcgaca 120
 ccggcaaatc ctgtgcacag aattggagtt gccattggag ctctcgtatt agatttgagt 180
 ggagtattgc attttttcaa accagaatat cagaatgcgc ttagtgccac aactctcaac 240
 ccattgatgg gcctagaaaa atctgattgg aaacaaatta gggagaccat acaaaaattg 300
 ctgttggaag gttcggaaact tcacagaaat gaagaactcc aacaaaaagt attgcttcca 360
 caagcgtcat gcatcatgca cttaccagct actattggag actataccga tttctattct 420
 agcatacatc atgccaccaa tgttggaaca atgtttaggg gaaaagataa tgctttaatg 480
 cccaactgga aatatttncg gtggatatca cggtcgcgca agctcagttg tgctctggac 540
 tgtatccgaa gaccatggga caactttaca gtgtggactg acccatttgg ccttnagnct 600
 atgatttgac tgaagngant tttgagtga agcacaatg gtcaagagcn gtgcaatcta 660
 nann 664

<210> 1565
 <211> 664
 <212> DNA
 <213> Ctenocephalides felis

<400> 1565
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 cttgggtcta aaaatggcct tatcgacaaa aaatatcgct ggcccaaaaa cgaagtgcct 180
 tacgttattg taggaggata cttcaatcga agtcaaatta attacattca taaggctgtt 240
 gcagaattta gaaacatttc ttgogttaa gttagacca aaacagttac ggacacaaaa 300
 tatgttcaaa tcacgggtct tccaggcggg tggtattcta gtgtcggatt ccaagatgga 360
 gtccagaccc ttaatttagc accatacgaa attgagaaa ggtgcttccg taaagcgact 420
 attcagcacg aatttctgca cgctttaggg tctatcacca gcaatcgact cacgacaggg 480
 acgaatacgt gaccatcatg tgggacaata ttttgcaaac actgaccact taacaaatat 540
 acggtagtcc gtcaggattc gaaccgggat gctattggcg tatgcntacg ggcttcggtc 600
 tcgaaacng aagacttcgc acaagancac gtgnagatnc atggcaaggg gagatatgan 660
 tcat 664

<210> 1566
 <211> 662
 <212> DNA
 <213> Ctenocephalides felis

<400> 1566
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 agatggcagc gtctcctggg agactccogt gctcgcaaga cccgtttgct ggacatgcaa 120
 gaacagttca gacagatcga ggaattatat ttgacattcg caaagaaggc atcagctttc 180

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aattcctggt tcgagaatgc cgaagaagat ctcacagatc ctgtcagggtg caactcgatt 240
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caggctgatt ttgaagccct ggcagccctt gatcgccaaa tcaagacgtt caatgttggc 360
cgaatcctta cacctgggtc accatggagg ctctcgaaga cacctggagg aacttgcaga 420
agataattgc tgaacgtgat actgaacttg ctaaagaagc tcaacgacaa gacgaaaatg 480
ataaattgag gaaagagttt gcaggaccca tgctttcata atggtgccga gactagaact 540
caatgatgga aggtccggtt tntcgacaga attggagncc ttcnagaagg taaaaagttc 600
ngccaaagag tgttgagcga atgaaaatgg tntnctggag acttnttgna caattcnact 660
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<210> 1567

<211> 648

<212> DNA

<213> Ctenocephalides felis

<400> 1567

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atTTTTTTtca tagttatgca tcctttatca ttaggattaa tactaattat ccaaacaatt 60
tgaacaagaa tatttattgg ttttaatttca aaaacattct gattntcata tattttattt 120
atttcattta ttggaggaat attaattcta tttatttata taacaagaat tccaaataact 180
gaatattttt ctttaaataat tnataaaact atttttatta ttttattatt aacattaaga 240
attattattt attataataa aaattttcta ttaattttta acaataattc catatttaat 300
gatttttaatt caaacttact tatatataat tttaatctaa ataaattata taattttcca 360
aataatttat taactattat attaattatt tattttattaa tttcattaat ttgngaggta 420
aaattcagat attttttatg gcctttacga aaaaatttta aaaaaaaaaa aaaaaaaaaa 480
tcgngggggg gccgggcca atgcctaag gggtcgggtc aatcctgggc gggttacacg 540
cggctgggaa cccgggttnc cacttatcgg ctgggncatc ccttngcagt gggatatagc 600
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<210> 1568

<211> 661

<212> DNA

<213> Ctenocephalides felis

<400> 1568

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taccggatta gatcctaaag gtccaaaagt tactcatgag gtatactttg acatcagcat 180
tggtggtgaa cctgcaggcc cgtgttttga tcggcctttt cggggggcact gtacccaaaa 240
cagttgaaaa tttcgtagaa ttgtccaaga aacctaaagg tgaaggatac aaaggcagta 300
aattccacag ggtcatcaag gacttcatga ttcaagggtg tgacttcacc aggggagatg 360
gaactggagg cgtcaattt atggagaacg ttttgctgat gaaaacttta agttgaagca 420
ttatggtgct ggatggttgc catggcaaag gctggcaaag, acctatggat ctnaattttt 480
atcctacaaa ccctgctggt agatgacgtc cgttgattcg gaaagtatca aggaatggat 540
gtgngaggaa atgatcacat cacagattca aaacaacccc actgtgtgaa tttagacttg 600
ngtnactggt ntaacctcgg gggtagaagt cactaataaa gattntcttt gtatttttat 660
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<210> 1569
 <211> 941
 <212> DNA
 <213> Ctenocephalides felis

<400> 1569
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 tgtaggagc ttaaacggag gtggagttgc aagaatgtca actggacagt acggtgatgg 180
 tgctggcaaa ggaggtggtg gtggtggatc catccgtgaa gcaggtggat ctttcggcag 240
 aatggaagct gctagagaag aagaattctt ttataaacag caacaagccc aattgaagaa 300
 acttaaggaa caagcaatag atcagaaaac tttccatgag gaacaattaa aacttcacaa 360
 ggaggctttg gagagacatg aaaaacattt ggctgagctt aagaagtaaa ttgaagtttc 420
 atatatagca ttatgaaaat gttagacagt gatnaaaatt caaatatttg ntctattact 480
 gaattaataa acttgcatta agcttctata agttattagt tttctagcat cttaatatat 540
 tcattgncac tacatatagt tttaaattca ttgngctat gcatgtattg gactaaatat 600
 tggaaataat ccataacaat ttttttngna aaaaaaaaaa aaaaaaactc ggnggggggg 660
 gcccggaccc caattcnccc tntaggggng tcnattacna atcactgggc cgcggtttta 720
 caacgtnnng gactgggnaa accctggggg tancccaact tantcccttg gaaaacantc 780
 cccttttnnc aagtnggggt aaaaccnaaa aggcccnnc cattnccctt tccaacaatt 840
 tgccccctg aantggggaa tggcaattng aacctttttt tttttgtaaa attccgttaa 900
 nttttgtaaa ancntntttt ttaaccanan gccnaaang g 941

<210> 1570
 <211> 931
 <212> DNA
 <213> Ctenocephalides felis

<400> 1570
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 ttaatctgct gaagaatttt acgaagacta attagtttta aatctacagt atggatgtgt 180
 tgaataggcc cgctcacgaa tttggaaatg atgaaacagt tgaaacttta tgggctatga 240
 aagccatgga tcatgttatt gtctatttta atgtacattt attaaaatat ttatcttcaa 300
 cttataggca atattcagta cagacgtgcc ttatttcaga tactttgctc tgtagacca 360
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 ccagatatgg atgttaaagt ctagatgaaa attcattaaa aggctataca ggaaaatgcc 480
 gatggagaga attttgtgaa cgattcaaac atatagaaga ttcagttttg gtccttaata 540
 cgcttagatt gcacattgga ttatagtcca gaaaatacta ttttagttnc aagagtcagt 600
 ttatgccata gaatctgctc gaaataaaga aggccttaat gactgnatca gaaaaaata 660
 tgctaatagta agtgatgtgc gagtaatgaa aatgtaaatc catagaaaat aattagcatg 720
 ggtatggtta aaaagtncat gaaaaaaaag nggggtttta tnttttttn tntttaataa 780
 angatttttt caaaaaaaaaa aannnnnnnn nnnnnncctt gggggggggc ccgggcccac 840
 ttccccctnt angngngngn ttttnaaatc actgggcggg gttttnaacg gngggaangg 900
 gaaaaccctg gggtacccaa ttaatncctg n 931

<210> 1571
 <211> 942
 <212> DNA
 <213> Ctenocephalides felis

<400> 1571
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 aagtctttga agactacatc ggcatcatcc aacaaaagta ccccgaaatc aggatagacg 240
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 aaatggcttt aatcatctgc gtcttgacca gagtcaatct attccgctac ctcggttag 360
 aagagcccac gtggtggacc tgggtgcctcg agaacaaaat gtactcctgc atgatgttct 420
 tcttcttggc aaacacgata gagggacagc tgggtgtcttc aggtgcgttt gagatttctt 480
 taaacgatgt ccggttggtc ccaagttgga aacgggaaga ataccttnac cccagagtt 540
 gttcagatta tagataatca tatgaatatg gttggctgnt aaagtogant ttaaaccgga 600
 gttttgngaa atgaataatt atgggttaat aacaccgttt gntattttga atttttgggt 660
 aaaccaaach aaatngnaat tttttctagg gttggtttcc attccangga ttntaaatta 720
 aaacctgnaa ccttcnntan tatatatatt tgaagangng nttgatgnag aaattatttn 780
 attaccttta atggatattt aanaaaaaan gggggtataa attttanttt ttntttggga 840
 aaancnanat annanantnt ttatngnggg gggggncccg nccccatttn cctnaggng 900
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<210> 1572
 <211> 918
 <212> DNA
 <213> Ctenocephalides felis

<400> 1572
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 tggccgcaag gaagaaattc attttgataa aatcacttca aggattcaaa agctatgtta 180
 cggattgaac atggattttg tagaccctgt ctcaataaca ttaaaagtca taaatggatt 240
 atatactgga gttacaactc aagaacttga taatctggcc gcagaaactg ctgctaccat 300
 gacaacaaat catgctgatt atgccgttct tgcagcacga atagctgttt caaacttgca 360
 caaagaaaca aagaaacaat tttcagatgt catggatgat ttgtcaatat gactaatgag 420
 tataactaaa agagatcacc aatgatagca gattatcatc ataaaataat aatggataat 480
 gcagatcgca ttaactctgc tattatttat gatagagaat tcagntacaa ttactttggg 540
 ttcagacatt ggagcgtctt atttantaaa aattatggga aaagtagttg gacnaccoca 600
 catatgctaa tgcggtagct ntttggatc attggggaaa acnntgggtc ngcaattgat 660
 ccctttactt antttctgga aaaaatttta ctcatgccna gccacatttt ttgttgncc 720
 ccnccnanct caattatnaa gtggnntttc ttgctttcca naanaangtt ttganggggt 780
 ttgntcttta aaccaagngg ntttttattc naaaatgggg gnggggtttg gngaccctt 840
 tttggttttt gggaaaaacc ttctttgggg gacccaaggg atttttaagg gnttngtct 900
 tcnccggttt naaanaan 918

<210> 1573
 <211> 922
 <212> DNA
 <213> Ctenocephalides felis

<400> 1573
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 cttattagaa gtgtcatatt gcaggagcga tctggaaaaa atacctacga ccacgattcc 180
 ttaacattgc aatataaatt agacaatgaa tttgagctgg tgtttgtggt tgcctttcag 240
 aaaattttgc aactgtcata cgttgataaa tttttaaatg atgtacattt agagttttaga 300
 gataagtata agaatgactt acaaaataaa aggtattttc aagaatttga ctttggtgct 360
 tgttataaca gtattctgcg ggcggctgaa gaatggggtc ggactcaggc taagttacct 420
 aaacaaatgc gttcttttga agattctatg aaatctaaaa agacagttgc ttcaatgatt 480
 gaaagaaagg gcgagggaaa aaaagacccc agaagaatgg taaacaaaaa ngcaaaaatg 540
 gttggtttga tgaagaaaaa attaataactt aaactggtat tggacccgng ccaaccaata 600
 attccaaaag nggtgatcca atgattaatc atgccaaatc gatgggaact tgcnaaaaaa 660
 atgggggcct nttaaaaaaa aaaaaaaaaac ttgngggggg gcccggnccc aattcccctn 720
 tagggaggcg antacaaata actggccgcg gtttanacgc gggaatggga aaacctggng 780
 ttccccannt aatngcttgg aganattccc ttttncaagt ggggtaaaaa caaaaggccc 840
 caccnatgcc ctttcnaaaa ttggccnct gaangggaaa ggnaaaatnt aacggtaant 900
 tttttaaaaa tccggtnaan tt 922

<210> 1574
 <211> 943
 <212> DNA
 <213> Ctenocephalides felis

<400> 1574
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 tcaatctgag agtagtatat caaacttgat gaaacatttt gctaacaaat taggttttaa 180
 tgaaaaagat gaaagtgatg aagatgaacc acagggtttta tcagaagtta caattgaggg 240
 tgtggttgaa tatattaaaa gtggaaaatg taaaaatata ataacaatgg ttggagcagg 300
 aatttctacg tcagccggta taccagattt tcgatcacca aactctggcc tttatgataa 360
 tttacaaaag tataacctgc ctgatccaca agctattttt gatattgatt acttttagtga 420
 aaatcccaag ccattttttt ccttagcaaa agagttatac cctggtaatt ttcggcctac 480
 aatttgccat tattttatta aactattgaa tgaaaagaaa ttggtattaa gacattatac 540
 tcagaatata gatactttgg agagagtatc tggattagat gaagataaat ggtagangct 600
 catggttcat ctacaaatca catgtatcgg tgnaggaaaag aatatnccct ggggtggatga 660
 aaaaaaatn ttttntgatg agaattccac ttgnacatgc cggagaaaagt ggtcaagcct 720
 ggatataccg tctttggnga aaatttgcca naaagggttca ttggctaata aaanaagact 780
 tcacccaaaag ngccttggtg aanaatcatg gganccgctt tgggtgtcaa acctttgctt 840
 ccttgatgg antgggattc ggaacntggc ctaaactttt gattaaatta aaaaaaangg 900
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<210> 1579
 <211> 919
 <212> DNA
 <213> Ctenocephalides felis

<400> 1579
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 aaagcagctg taccaattgg aaagaaagct gaaagtata aagataaata agcacaaaaa 180
 attatattta tataataatg tggatattta attgtatagc gatatacata actcttcaaa 240
 cataaccaca ccctttttta caataattaa atcaactaaa tatgaaatat atattatata 300
 tgttcgattg tttggacata tcgaaagcta tatgtgaata ttgcaaactg aattgatttg 360
 tagtatatat ggaatcaatt ttttttcatt atgaaccaat tcgatagatt tatagaaagc 420
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 tttaatacat ataatatgtc tcatatataa tatttattat acattctttt aaagaaatat 540
 gttaaagggt tgnaaaaatat tacttttttag tattagggtc tattcaaaaa ttgggtgggt 600
 ggaattattt ttggnattgg cggtaaattt tattttttaa taatatgcaa ttctcatcct 660
 tgnctttaag aataatnttt taaatatgga ttggtnaaaa gtaangtatg aattttactt 720
 ntgcgcatcaa tncaggtatc attaaatttn ttttaggagt ttaaaaaana aaangcncnn 780
 gnnnnngnnn nnnngntnnc ctgggggggg ggcccggncc caattncct nagngggggn 840
 ggttaanann cnggccgggt ttnnaacggg ggnngggnaa accnggnttc cccaattaan 900
 ngctgtggaa aaacccct 919

<210> 1580
 <211> 935
 <212> DNA
 <213> Ctenocephalides felis

<400> 1580
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 caatatggta cagctggatt tcggaccaaa gctacagact tggactatgt catgtttcgt 180
 atgggggttc ttgcagctct tcgttcccgt gttaaaagca cagcagtaat tggattaatg 240
 ataactgcat cacataatcc tgaagaagat aatggtataa aactcgtaga ccccatggt 300
 gagatgcttg aacaaagttg ggaagagtta gcaaccactt tagttaacgt tagtgattct 360
 gagttagagg ctacagttga aaaaattgta aaagacttga atatcgatct taatttgaag 420
 gctaatgtgt ttattggtat ggatacaang tatagtacgt nccagtcct tgcaaagctg 480
 ctgttgatgg agtattatct atttcggggg atctcccaga gaattttggt attggtaccg 540
 actcccaatg cttcactatt ttgtttntn tgcaaacctg atcaagccta ttgggaaaac 600
 ctactggaag aangntttta tacccaattg gataacttgc ttcaanaacc ccttcgggcg 660
 angttncatt tcaatgggaa agnattnncn caaaatttn nttgatngg ngccnatgga 720
 ntggggggca aaaaangntt caatttnaaa aagacngng gangtttgat ttgttttta 780
 acaancggcn aaggaaaata aatnttaggn gnggggctnt ttttggaang acaccattcn 840
 cncccaagg antncnntta aaaaantttt canngngntt tttgttgaaa cccaancgna 900
 tgnttcnnt tnnnganaaa aaaaggttt antgc 935

<210> 1581
 <211> 920
 <212> DNA
 <213> Ctenocephalides felis

<400> 1581
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 cggggtaaaa tttgntaaaa ncgnccattt ttaaccaatn ggccggaatn gggaaaccct 780
 tnntaatnca aagnattgnc cgggntgggg tgggngtggt tcngttngga acaaagtccc 840
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<210> 1582
 <211> 904
 <212> DNA
 <213> Ctenocephalides felis

<400> 1582
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 ttaaagcttt aggtttaagt gaacaaaagg cgaaagaaac gttaaaaaat acagttgtta 240
 cgaaaaatth aacattagca ttacatgagg tgaggggcat tattttgccc caaggagctg 300
 gttctthtaat ctattatgtg gcaacaaaaa tcaaacaca gattatagat caattgcctg 360
 tacttgtaaa atatatatca acatcaaaat tagacacaac agttagagtt gatgcggcct 420
 tgcaatttat gttgtctcat ttaaattgat atcaaatcga tgaatttgag aaggcttggt 480
 gaattggtgt tggtgtacac ctgaacaaat tgaaaaagca gtaaatgagg ctatggtgga 540
 acataaagag gcaattcttg agaaacgata cagatacaac actggtcctt tgatgcaaag 600
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 aagcagcttg gggccatgtn tttntgaatg atgaaaaaaa agncctthta tgcctctggg 840
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<210> 1583
 <211> 907
 <212> DNA
 <213> Ctenocephalides felis

<400> 1583
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 aaatctntca caagatatcc cagtctgtgg gtcttttggt gcatnaaagg aaacnccctn 840
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 agccntg 907

<210> 1584
 <211> 898
 <212> DNA
 <213> Ctenocephalides felis

<400> 1584
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 gataagccaa tgttactaaa aaggcaattt ctttattttg aatattatct tatcgagtag 180
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<210> 1585
 <211> 912
 <212> DNA
 <213> Ctenocephalides felis

<400> 1585

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<210> 1586
 <211> 941
 <212> DNA
 <213> Ctenocephalides felis

<400> 1586

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<210> 1589
 <211> 928
 <212> DNA
 <213> Ctenocephalides felis

<400> 1589
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 aataatacat aatttaccba gcaacgtgca ctgtataacc tacaaatcac gatttcgact 180
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<210> 1590
 <211> 922
 <212> DNA
 <213> Ctenocephalides felis

<400> 1590
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<210> 1591
 <211> 926
 <212> DNA
 <213> Ctenocephalides felis

<400> 1591
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 cataactgca cgcgcgcagc tatcttagat tttccctctg atggattcac caggagcaa 480
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 tTtaaatggn ggccagaacc tcgggatntg gcttgnTtg atttgccgaa tTggccctnt 840
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<210> 1592
 <211> 943
 <212> DNA
 <213> Ctenocephalides felis

<400> 1592
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 aagaaccgaa atgggttact gccgaagaag ccgtaaaaat tattaatatca gatgactggg 240
 tTtacgctca ggtgTcggt gctaccccaa tcaacttatt aggtgcgatg actgcacatg 300
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 atgcaagcat caaaagtgat aattgcccaa gttaatccta aaatgcccgT catttggtga 660
 ctcatTggtg cacaaaaagt cacatagata tTgtgtanaa attggtgaaa ccgtggTacc 720
 catgngngna aaccaccta tangaaga aactgcaatt ggngcacata tTgnnaataa 780
 cTtgngngaa aaaggngccc actTtaaatg ggtntnggaa ccattcctga tgcngTntt 840
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<210> 1595
 <211> 929
 <212> DNA
 <213> Ctenocephalides felis

<400> 1595
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 acaatttgca tggaggcatt tctactggta tctgacaaat gaaggatttg aatacttgag 240
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 aaaacctggn gttnccaa atattccctt ggaaaanatc cnttttncca gttgggtnaa 720
 aacnaaaaag gccccaaccg atcccttttc caaaaatttg cccaccttaa tggnnaaagg 780
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<210> 1596
 <211> 935
 <212> DNA
 <213> Ctenocephalides felis

<400> 1596
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 tottgagact togtggatca attccccgtg agaagacttg ggatgtcgta gttgatttgt 180
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 gnagaanaat cccctttcgc aactggngta aaaaacnaaa agccccacc cgatcgctt 720
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 caaaaatccc tttttaaaaa acnnggcnc canct 935

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<210> 1597
 <211> 941
 <212> DNA
 <213> Ctenocephalides felis

<400> 1597
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 gagaccgaac agcaagggtcg ggatgcaatt cagaacctaa acgggtacgt aataaacggc 240
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<210> 1598
 <211> 937
 <212> DNA
 <213> Ctenocephalides felis

<400> 1598
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 ggtttntaa atntgggaaa ccottttttg naatntt 937

<210> 1599
 <211> 648
 <212> DNA
 <213> Ctenocephalides felis

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 gcaaggaacc tgcctgtgc agctgcctgc agacggagcg acacgccagt catgacgtgc 180
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 ctaaactcag agcactcaag gaccagcatc aactgctaca ggaaaattac aacacacgac 480
 aggttaatac aatttgatag aggcttcaaa gaaacgatag tgtgatatta cagggtggtc 540
 atgtatagcc ganggccaac gacatcgctg catcgagggn agagcncgcg gtgtttnaca 600
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<210> 1600
 <211> 650
 <212> DNA
 <213> Ctenocephalides felis

<400> 1600
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 gagaagnctc tgcattggtg cttgnggcca gtgatcaatg gntcaattgg attgttctcg 600
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<210> 1601
 <211> 649
 <212> DNA
 <213> Ctenocephalides felis

<400> 1601
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 gctctaacca atttgcaatg tgccttagaa caattccaaa gagataaaga tcangaaatc 180
 caccaatgca cagaaaggat aagaaaccaa ttggaattgg aacgacagga acaaaactgct 240

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<210> 1602

<211> 646

<212> DNA

<213> Ctenocephalides felis

<400> 1602

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<210> 1603

<211> 643

<212> DNA

<213> Ctenocephalides felis

<400> 1603

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<210> 1604

<211> 651
 <212> DNA
 <213> Ctenocephalides felis

<400> 1604
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 ggggtgtagga tcattggcag gttgactgtg gggaataaaa atggtttatt ggtgccagct 240
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 tcaagtccgt agtggccgga cagtnccgag caggagnttt agcagagggt gnagcaacat 600
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<210> 1605
 <211> 637
 <212> DNA
 <213> Ctenocephalides felis

<400> 1605
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 tacagtttcc ttgcaggatg gctctcagca ggattgttgc cggcttttagg agccctagga 240
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 anactggacc caccagtggc tctttgctgt cttgatt 637

<210> 1606
 <211> 644
 <212> DNA
 <213> Ctenocephalides felis

<400> 1606
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 gaataattcc cctcaacttc agatatccca taccagggtt gggcatagac tggacggcct 180
 ggaggttgta cgtcctgata tgctcgcttc taatcttttg ggctgatta tgattataac 240
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099193-101
 TTTT "GCTT650"

<212> DNA

<213> Ctenocephalides felis

<400> 1609

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aaaaactcgn gggggcccg acccattcgc ctatagtngc tatacaatta ctgccgcctt 600
tacacgtcng actggaaaac ctgcttncca cttatcgctt na 642

<210> 1610

<211> 634

<212> DNA

<213> Ctenocephalides felis

<400> 1610

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gccctgctcc tacaaaggta gaagaagccg atagtgtga aagagatttg gtcaacttcc 180
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aaagtaccaa gatgccattg aaggagaaag tggacaatgg agactgaagn cacttatgtg 540
tggtgccaac gtgaaatgtg cctgcacttg aactanagg accnntgaa gtnntagagg 600
tagaaacata ttccagttg aaangaantt gacn 634

<210> 1611

<211> 639

<212> DNA

<213> Ctenocephalides felis

<400> 1611

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<210> 1612

<211> 640

<212> DNA

<213> Ctenocephalides felis

<400> 1612

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aataaatgac aaaacctaata aaaaaaaaaa aaaactcgag gggggggccg tcccaattcg 480
cctatagtga gtcgtatata attcactggc gcgtttacac gtcgtgctgg gaaaccctgc 540
gtaccacatt atcgcttgn cacaacccct tcnantgcg tatangaaag ccccnccgac 600
gncttncaca gtgccanctg atgggaangc aattgnagct 640

<210> 1613

<211> 644

<212> DNA

<213> Ctenocephalides felis

<400> 1613

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cattggagaa tatggtctcc gtaacaagag ggaagtatgg cgtgtcaa atcactttggc 180
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gaggaagact tgagaaagga tcagcgtgnt cactgccgag gaaaagagat aactttcaca 600
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<210> 1614

<211> 635

<212> DNA

<213> Ctenocephalides felis

<400> 1614

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acagcagcat ttctggtgtt tgggtatgga ggggtcagga attagcattc aatctttccc 120
ctgactggca aattgactac gaaacctaca actgggtcaa attggacccc aaatcagaag 180
agaccaagaa attagtcaag caatacttct cctgggaagg tgccgataag aacggacgca 240
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tgctgatgat ggcatgttat attaaaattt cttgaaataa attattttaa atctaanaaa 420
aaaaaaaaaa anaaaaaaaaa aaaaaaaaaa ntgggggggg gccgggcccc aatcccctta 480
tagggagtgg ntaacattcn ctgccgcgtt tanaacnggg gatgggaaac cctgngttcc 540
caattatgcc ttgaacnadc cctttccnan tggnnnanag aaaaggcccn cctncttcc 600
aaattgccac ntnatgggaa ngaanttgag cttat 635
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<210> 1615

<211> 641

<212> DNA

<213> Ctenocephalides felis

<400> 1615

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agaatcaatt caatattcaa gatcagttta agaaatattt tcaagctgag cttaaaacttt 240
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<210> 1616

<211> 636

<212> DNA

<213> Ctenocephalides felis

<400> 1616

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atgacttgga acgccacaaa aagttactga aaccgtttgg ctgtgctaca aagcttgaat 480
gaccaccacg ttatttggaa ggacttattg aacccaatat ggtactgtgg caaagtgccc 540
acaaaaccac ccagcagtgt aggagttgcc tgggctgntt gagganactg tccactcagt 600
ccggtattctt ctmntgagac attgaaaaaa gctatc 636

<210> 1617
<211> 650
<212> DNA
<213> Ctenocephalides felis

<400> 1617
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ctgagaaata cgatctggag gaacgccaaa aacgccagga ctacgatctt aaagaattga 480
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<210> 1618
<211> 642
<212> DNA
<213> Ctenocephalides felis

<400> 1618
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<210> 1619
<211> 646
<212> DNA
<213> Ctenocephalides felis

<400> 1619

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<210> 1620

<211> 643

<212> DNA

<213> *Ctenocephalides felis*

<400> 1620

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<210> 1621

<211> 639

<212> DNA

<213> *Ctenocephalides felis*

<400> 1621

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gaagatattt ctgtactcaa agctgtaccg gatttggatc ccagtactga gaaagaatta 540
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gtgtaggtgt cngagaactg aaataagcat gcaaaaataa 639

<210> 1622

<211> 635

<212> DNA

<213> Ctenocephalides felis

<400> 1622

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tgttcntggg ngnggtaaaag atggaccgga tntct 635

<210> 1623

<211> 641

<212> DNA

<213> Ctenocephalides felis

<400> 1623

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<210> 1624

<211> 407

<212> DNA

<213> Ctenocephalides felis

<400> 1624

tctccatata aaaccttaaa tctttcaaca aaatgatgaa gtagctgctg agcataatct 60
 aaaagatcat ttaataacgt gttgctacat aaaatttttaa tagcaatatg taaagtaaga 120
 aaatttttat agaaagtcac ttgaaatatg acatgagatt tcaaaactac tggaccacta 180
 tacaataata attgtctaaa ttctgtagct ttccatgggc tcacatatat caatgatcga 240
 ggattcctag caaagtcctt ggatatataa atctttaagc tgcataaaaa attggaaaag 300
 tcattagttt tagcacatgg caaacgaatt ggaagctcac cttcagtcca caaaagcatc 360
 aatctcttaa ctgttcctaa acaaatcaaa ttcatatagt caagtgg 407

<210> 1625

<211> 345

<212> DNA

<213> Ctenocephalides felis

<400> 1625

tcatngngca tganntatgt gctttcagcg tgaatttatt cagtgccaat tatnttcact 60
 tacagaaaag attctcaatc ttgattatto taaatttccg attangaaaa ttactcangt 120
 agaacttatt acgggngcca caaaatnttc cggttattta agggatgatt gtatattaat 180
 aaacgcattn gtcaaagcag agctctcatt catgataagt cgataaaaca taaaaaatg 240
 tgagtcgatn tcaaccctca aacttacatc ttttagtgng ggtatggagc tatgcaaagg 300
 aaaatctttg caattagatg ttcaaataaa tctcgtttac tgggtg 345

<210> 1626

<211> 77

<212> DNA

<213> Ctenocephalides felis

<400> 1626

cgaacaactt tcgacaatct tattgctccg cttcgcaaca tgattaatgg cagttttttac 60
 tttacggtaa gtgtgac 77

<210> 1627

<211> 285

<212> DNA

<213> Ctenocephalides felis

<400> 1627

gtattgaatt tttctttctc attctgaaag tattctatatt cggatggaga acgaatgctg 60
 cttggcaaaa tcattgatta tattataaat catacgaaca aatttatctc gaatatattat 120
 tatagcgtca tattgatcta ataaaagaaa aaaagcagtt caacataaaa atattggaaa 180
 aagtgcatac attgcaaaaat atccaagtat tgcttataat atcgcaatta tatgtataaa 240
 cttcgcaagt cgagtgcacac gtttaacgta agcgcgggtt gtggt 285

<210> 1628

<211> 436
 <212> DNA
 <213> Ctenocephalides felis

<400> 1628
 tcgtaattaa taaaattaaa cttaaaaacg ttcaaacgct atcaaataat atatattttg 60
 ttctcaagtg aaaattgcct tttccagca tatttacata aagattcatt aatattagag 120
 aaattttaat aacaaaaaat atatcaaata tttgtaggcc aaccgttgag ttacttcctg 180
 aaaaagctgc gttgttaaaa agaatcatta attcatcaca acagctcata cgactattag 240
 gctctgatta ctggtcaaag aaagcaaata ccttgatttt tttttaaata ttttgtcttt 300
 ttaccttttg ttaaaaaata agaaatatat tataaaatta tattaataat tttccggcaa 360
 agaattgtta ttttgctgta attttacatt ttgtaaggca tttttggcta atattccgat 420
 catgtcagag agcaga 436

<210> 1629
 <211> 103
 <212> DNA
 <213> Ctenocephalides felis

<400> 1629
 gagtgctacg atatatactt tcattgtatt tatttatctg gaatctcggc acgttaatat 60
 cgtctcaaat tgagtagatt tccgttgcta tctttgataa atg 103

<210> 1630
 <211> 436
 <212> DNA
 <213> Ctenocephalides felis

<400> 1630
 ggcttttcaa agcgctttga atatcttgat atcaaaaata atatctgtag gtgtatctac 60
 ttgtgcatca gcaaaatatt ttctagagta ttttagtaaa caaatgtggg cgacgtaatt 120
 ttcttggaatt attaatcag atctgtttca tattttagat tttttattat tacaatgaga 180
 taagtgatit gaatactttg ttataaattt ctataacctc attaaattta cgaatatttc 240
 ctcaatcaac atgataaaaac tcaccaactgg atatctaato tttttgttct aactttatgc 300
 atatttgica tagtaattac taactgttta ttattaaaga aatagatagt aatttcatct 360
 tgagaaatga aaaataactt cgtgataaat aattctocag atatttccac ttggaaacat 420
 tttggctctt tcaagt 436

<210> 1631
 <211> 281
 <212> DNA
 <213> Ctenocephalides felis

<400> 1631
 aatngngact ttnttgnttc taaaaatctg ataaaatttt aaataacttg aagattaaaa 60

agctttttnaa aattcaacat acaaaaaaat acatgcaaaa gcaaatatac aatttttaaaa 120
aacctgcaan tgtgggncaa cancactnat tcaacattca cctgatctt tcattctttg 180
attttttata agctacataa antgccaatt ctttcttttc tttgntgata ttacgagtat 240
cgtattccaa tctgtgcatt attatgcgtt caacaagtcg t 281

<210> 1632

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1632

gttggccgtt gtgaggttat cgtgtgcctt gaatcgctcg aatctaagct ccatcgtgct 60
aattatttcg ataactccca ccccgactgg gacatctcga gagtcgggaa gcccctggca 120
aaggctacgg cgattttgtt taaatcagtg tctacagttg aacgggtcca cttggacggg 180
aaacagtgtt catacgagat tattatatat ttaaaattga ttgaaacagt gacaaagtga 240
tatagtaaaa tattttacta actgttctta aggattcgaa tcataagatt tctttacatg 300
atggctgaaa tgaccgccag cacgcgcttc aaacaataac accaatcatt ctccaccaca 360
agtgcaacaa ttgtgaaata aaacttgatt ttattocaat catataaact ttaaatacag 420
tgcaactaat caaaataatt tgtcggcaat tgtaaaatac ctaagtgtcg ataagtctat 480
atgtgatcag gctaaagcct tgaaaaagaa tcttagtagg aatattagta ttcgtattaa 540
ttaattaat 549

<210> 1633

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1633

gctactccta accaaaaaac acatttttga taagttcgtt agtggcttct gtcggatttt 60
aatttttaat tcaatcttac atttgcaggg tcaaataatt taactatttt tatttaatac 120
agattctaac gataatcttt tattttgtaa tatgtctgaa gaaggaacaa cgagaagaac 180
tacgaggctg cttgccaggc ggctgagtag tgattcaata tcgcctccag ctgcagggac 240
tcctggcaaa aaagcgaggg cttcaagagt tacgggggtg ccgtctattg cagaaactaa 300
accgaaagca gttagcaact gttaaaccgc aagattaagt actgacttaa atttagaaga 360
acctggaagc agaccatcaa cacctatatc aactgaaagg cgtcgttctc gccgactaag 420
tattgcttag atgaacaacg cccacaatct gtatcaactc tcccattggg ggagttatac 480
aagaagagga agacatcaat attttagcaa tgaaagatga tataaataat aaatccggta 540
tgngtgn 549

<210> 1634

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1634

0990991310

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agttacagct cctgttaatg ctttagctga aacaagtcaa acttcatcaa ttttgggtgg 60
tgctaaacca cggaagaac ccactgagaa ataagttatc aagttttaac attaattatt 120
aaccaccata tagaatacca tottgaatca tgtaataatt ttctgattaa aaattctgca 180
aaactcataa caggcgctga taatcttact cttgcaataa attctttaac tgatatataa 240
aatgtatcaa gttttgtaaa agaaaaatca ataattattg atttacagaa taaaatattt 300
attttgttta aaaattgact aatactttgt aataatatgt aattcttata tatatagatt 360
aaagagttgt tgtagtgctc ttttgttttc aaatagtttt acactaatat atttaataca 420
aaacgcttta caaattttac aataattgat gaaaactatt tgagatttta ttctcgaagt 480
acaacttatg tattaanaaa ngngcnnnnt gnnnnnnntnn cctngggggg gggccggccc 540
cattcnccc 549

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<210> 1635

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1635

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agcntaaata acaagactga cagtttagtt ttaacaattc atcatgggcg atggaagaga 60
tattgaacga cagccattga ttcaaaatga tggaactgga agccttagga atcaaggatc 120
ctatacggaa ggttctcaaa ccacgacggt ttccctata ggtcctgatg agttgccacc 180
gtcttaccag ggaagttcgg ccagtggcgt gcccatggtc acttgccagg tgtgtcaggc 240
catggctgat atttcaggca aacgcgaaca gcatgtcgtc aaatgcaatc agtgcaatga 300
agccacacct atccgcaatg caccaccagg caagaagtac gttcgatgtc catgcaactg 360
tttattgatt tgcaaaagtt catctcaaag gatagcttgt ccgagaccaa attgcaaacg 420
cataataaat ttagcaccta gtcctgtgac accacctgtc ctcacggtgg aaattttcgt 480
gccaggaatg tgcagggttt gtgtgctatt gtggggancc tttttttcaa caccctaaca 540
atgcctcgc 549

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<210> 1636

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1636

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gctaataatg tgacagccat aaatattgta gattaatgta gaataatttg tattgagatt 60
tagattttgt agcatactag aatgttatgt gtgcttgaat aatgcaagtg agggaaccaa 120
taatttggtc tgtttttata atacatttta gataataatt attggtgaac tcaatcttgc 180
atatacgccg ctaatgaatt aaaccagcag gcatataatt tttgtactta aatatttata 240
taactaaaac tgatacgggt tacgaaaaac acataactat attattttatg tttctagacc 300
cgcatgaatt aaaacgaaaa cggcaaaaaa ttgacgggga tccaaaacat cttttatggc 360
aactgcaggg tcaaaatcct tctacagta agtcattttc aacttttatt ttttttatca 420
gcaaatcaaa cagggttcaa tgtcagggtg cgggtgaatca cggggtggat gaatataaaa 480
actcatatca tacgcttatt acatataaca ctaccatttt catattatca gtaattttct 540
aggagnata 549

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<210> 1637
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1637
 atggcatcct aaacaatata ataatataat aataatgaat ggcatttctc gctaacagat 60
 attttaatat agcgatttga atagtttttaa tttatttgaa tattgttcag agtgatactt 120
 tttatatattg ctgtaataaa aatgattatt atgataactt atattatgaa agggaaaata 180
 tattttaaact ttttaattgat tacccaagag gatattgatt tgtatatatc tacttgaata 240
 tgaatttgaa cagttaacat tatottcaaa tttttaatat aatttaaaat tattggttac 300
 tagcaaaaac gtcaagatgt ctaattacgt gttgaaagtc aaatcaaaag aaggacagca 360
 tattttaaga gatctcaaact cttccatgac tctgggagat cttttactga aactttcatg 420
 ttgacatcga tatctaaacc aatttgcaaa ttttatcggg ttttcgcct aaagcattag 480
 atttatctga tnagagtaag actttaaaagg ngagtgattt nattcaggag atctgtattg 540
 tgaaaaaat 549

<210> 1638
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1638
 gagaagggaa actgatcacc atgaaattcg cagtagcaat tttgggcctg gccctgtgtg 60
 gtttggcatc agctcagttc cagaatggac gcatottaga accaccagta cctgcactct 120
 gogcccaaag gacgatacac gaacgtagcc cagacggcaa aggatacttc ttctcgtggc 180
 gtgaccacaca attggctggt gttgaggaag attggttggg cgtccgcaac ttctgtcgcc 240
 aacgttgcat ggacagtgtc agtttagaaa ccagtgccga aaatgaatgg atcaagcaaa 300
 gaattgtcaa tggaaatgtc aaatacatct ggaccagcgg tctgtctatgt gacttcaagg 360
 gttgtgaccg accagattta caacctgttt ccgtaaatgg tggttctgga ccgctgaatt 420
 gcaaaaactt gccaaccac agacagacaa caaacgact ggtctgaagg agtggtattg 480
 tcttcctcac cagatacaag aattgaacaa ggtggacaac cgaaactgtt tgcagtttga 540
 cactttaca 549

<210> 1639
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1639
 ccccttcccc ccttccccac aaacatcacg tgtattttta gttatgaaaa aaaattgtaa 60
 ttattttgat ttttggattt ttttaaaaaa aaatttcttc tccctaaaaa catcacctga 120
 ttaatggacg catcotatatt gtattoctta tataaaaaata aaaaatgtga aatttagata 180
 tactgaatga ttactcgtac caagagtcga aacatataaa taaataatat aaaaatcaat 240
 ttaccatttt caaatttgat gaattggttg caaactatac caaattcctc aattccaatc 300
 atattcatat acaaaaaatc ctatcaaatt ttccgattca tttaaaaccg attacaatca 360

attccattag gcaccagtat ttataaataa aattttgogc atatgtgtga acatatattc 420
 attattttat tagtctgaga aatagatggt gactattoga gagagcagcg aaatgtcgat 480
 atttgccacc tcatcagatg ttggataacc aaccgntaat aaccgatttt tagggggatg 540
 ttaangcct 549

<210> 1640

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1640

tatTTTTggg tcttttatgt ttacaaaaa ggatttatcg ttttaagttt aaataatgac 60
 aatcttaciaa attaatctaa acaaaaatgt aacaatattg ctttaattaa ataattcggt 120
 tattgttata ttgaatccac aaatatgaat tggtgattat tagcatcggt tatTTTTgtt 180
 gtaaataact tatgcaaagc agagttgatc ttataaaaaca tctaatactt attttattat 240
 acatagtgtg atacttggtt ttattttaaa tacattaciaa actaaatgta gttcatctat 300
 gatttacatg aaaaaaaatt agttattatt tgtagtggt taagacattt tacgcaatat 360
 ggcagtaaatt aaatgcgcac actaaaaaatt attattaata tttttatagg aacgaaagtc 420
 tataattcta tacactacat cgctttgtgc aattgaaata atatttttca ttatattgna 480
 tgaatttagt atatcaaaac atttaaaatg gttatatgta tacaggtncat ttattgtaatt 540
 aatgagaag 549

<210> 1641

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1641

gaacagttgg ataaaaataa aaattgtgaa ctaaaattta ttttcaaatt tcattaattt 60
 ttaacaaaacc cttttccgta atattgacgg aacctgccta agtgaagcaa aggacgatat 120
 cggttgtcgt tggtagtgtg gtgaaactat aaaattgtga ataaaactta aaacatcacc 180
 aaaaataatc cacacacttg cagtaaaciaa attattattt gtctctatag acagaaccaa 240
 atagaagaaa aactcagctg ccaaatacaag attgacataa ctgtcaatta tttttatggt 300
 gatcatttat taatatatca attttgactt tcatcgattc tatctcggcc ccccttccca 360
 ccatgacgct ttcgccaac agcaatgcta ccaatcgctt cgggtcgcag cagggacgta 420
 gcctcaatta gccgccgtgc gaatacaggc cggcncagag gatatgcgtg cgcaagcagt 480
 caaacgttgc aaaatcaaag tgacggtgca agagacagct gnagaatcta ttgacagaga 540
 tacgcgcat 549

<210> 1642

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1642

attagacttg ccacatctaa ataataataa aattagtaaa ataatttgta aatattttatt 60
 taaaaaataa aattaggatt ttttattaat atgaaataat aaataatcaa ataaatttag 120
 tgtaaataat aaaagtgtgc atgtgtcatt cttgattaat attcaacgca attaaagatc 180
 aattttgaat gtatcctctc aaaaattggt gtatgaggag atgactagca aattttttat 240
 aaatgtcgtg gataaatgag tttcgaaaat ttattttgga ttttataaga actgttttcg 300
 aattataata gaggggaagag ctagaaatcc acatatcaaa attttaaatg gacctgttat 360
 agaagaaaat gaaactcaac aaaggaacca tgaaaaaacc ngagttctct acaattgccc 420
 ctgtgtcgaa gaagacgatg atcgagtata tctaatttga atcagatcta cacaaatgag 480
 tggccatcct gcccatttta tagactcaga caagcggagg gcccttggan ggcagatgaa 540
 attcccant 549

<210> 1643

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1643

acatcaatgc aagagaagac accaacaaaa aataacgaat ataaatcgaa atttgcgaaa 60
 ttaaaaattc gtgatgatca gataagttac aatattttgc aattctttta aagtaaatat 120
 ccaaagtttt aacattataa aattaaaaaa aaaaaccaat ggggaatttg gnttaaccaa 180
 tttttgnacc tnnaaagnaa ttnttttttt tagnaagnacc nnntnnaaat tttgnttggg 240
 nccaantaaa aaaaccgngg ncaggnatnt ntnttttcnt acctnntgga tnnnttttac 300
 ctnttacnnt ggttttttaac ntatttttaaa annnttttgn tttongaggg gttannttta 360
 nnaaatgnct taaaaatttt aatnttttcn tttnnaggnt tttttggggg aacntttttt 420
 aaaacctent tnttananta ttcnttgga cccgtggnaa ncatttgggt ttantantta 480
 aaggatatng gnnggggttt 500

<210> 1644

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1644

acacatagca aattaagtct tcgcttgat ttacatgaaa attgccaaaa aaagaatata 60
 ttcattatag gaagtattta ttcaagtatt ttttgatgac tgttctagct gttcatcaat 120
 tcatacttaa aatagttacc ctttttaatt tttacagtat ttaaatttaa tagttggtat 180
 agtattttat aaatttttaatt ttgaagcatt cttttatagg tttggaaatt atatttttac 240
 aaaaaaaaat aaccctcca attgatttta aacaaaacca taaaaaacta ggtgctatag 300
 taaacagcat ttgatttgat gtatacattg cattgaaatg agtgagagaag caagatgaaa 360
 gcctatccat taatgactta agacttttta gaaatgtttt atatatacat atgtatgcta 420
 gatatttaga tgggtgtcttg taattgaatt agattttacaa ggaaccaaatt gttctacatt 480
 aaaactaaat ttatctctat 500

<210> 1645

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1645

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acagtttttt ttttcctcaa acacgagcta ttggaaaaca aaattaatta agtttagttg 60
aaagtcaaat tgacctatat atatatatat ctagttttga tatttgtctt acagattatg 120
gttggtcgatt tatatatggt tttattgaat acttgatgat tttattattg atttcctttt 180
gtttgttggt catcaacggt ctttggttaac aaatggggga atagctagtt aggaacccaa 240
gacgtcatat atctggccga aagcacaatt actgaaggca cacaccaca actacagtct 300
acgctcaaat tcatattaag taaaccaggc tctggacgtg cggccaacaa ttatggatac 360
cgctacgggg acctcaaaca tcggttgaaa gtagcaacaa tttttagagc cgagggcggc 420
tctggtgtga caggggggcg tgtgacgata atcataatta tcgcgtattg ataattattg 480
tcgctgatgg tcgcaacccc                                     500
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<210> 1646

<211> 277

<212> DNA

<213> Ctenocephalides felis

<400> 1646

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actgaatggt acaaattttt acttgatag aaggagcaat tttcgttgcc ctgcaccggc 60
gtttcgccag aatttaataa ttgtttatct tattgcattt aatcctcttt ttttaaaatg 120
atgcatatta taataatata cttttaaatt attattgata caactttttt gcaaaccaaa 180
ataggtatga tcttttaata atttttatcc catttaaaaa aaattctatt caacaaatat 240
ctttttttca atgcaactag gattttatat gtttaagt                                     277
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<210> 1647

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1647

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acttaagtaa tatgttagta aatttatatt aggaattatg acaaattttg ttatattaga 60
acttatatat attaggcttt acaaaaatgt tatttgatg aactatttta tctattagat 120
ttacttaaac attatagaga taggaaaaaa tctcttaaac cattttgcta aaactttgag 180
aacgaaaaaa taaaacatct acaagacatc aagtcttttc ttttaaaaga gtaacactcg 240
aaaagggagc gttcattctt agaccaaaag aactacaaac atattatatt ttataatata 300
gaattattaa tagtagtatt tttttactaa tataaatatg ttttaatttca ggttattttg 360
actcgtcatc ctatcaaatt agtcaagaaa ataacgtcaa cagaagtcag aaaagaacca 420
aaaaattttt ctgctcaagt gcaaaaaggg ctacacttat tcacgtgggt gcaacaccac 480
ataaaatacg aatgtggcaa                                     500
```

<210> 1648

<211> 331

<212> DNA

<213> Ctenocephalides felis

<400> 1648

acagtagatt gttttgaaat cggtgccgtc ccgtaagtgt taaatatatg taagcaaaat 60
gattttactc accaatacat catacccat gcaaaaatac ttttatagag taatgcaaca 120
cgcttacctg aaacaaaata aaaattatta aatacattgc aaagaaatat ataaggcat 180
gaagaaaaat tttatgtaac gcaataatta tatgtagtag cagtcttaca aaaatatgta 240
ttaactaaca atatcaatag acaattattt aggggccaat tctgctgtaa aatagaccaa 300
tgtaagtaa gggcttctca tacaaaattg t 331

<210> 1649

<211> 113

<212> DNA

<213> Ctenocephalides felis

<400> 1649

acgagttaat aaacnttnaa atataataag taacatttta aagntgcac ttagtgaaaa 60
tctttaccat gttccttgaa aataataaaa caaantaaac atttgtgcca tgt 113

<210> 1650

<211> 474

<212> DNA

<213> Ctenocephalides felis

<400> 1650

acaggaagtt ccagcaattt gccttaaggc acgatgccat acgccactag tttttgtag 60
ttgtatgttt aattatgcat taatcaaata attttttcat agttcaaaac cagacgggtt 120
tttttttaaaa aaaaaaaga attataaaaa aatatgttca atgtgacagc cagttgtgtt 180
catgcaaggc gacggaaaga gcactcgtgt cgagcaagcg atttgcccg tacacatatc 240
agtttggctt gacgagtatt tttacngngc ccgcctatag tgtgttaata tgatgcaatt 300
cagtcattat caacacgaga cagtctaata aaatttattt aatttttagct attatatcaa 360
ttaaaaaata ctatacgtct ctatttattt ttgttcgggt tactagaaac tggatgaaat 420
atttagtcat acttttaaga agtaacactt ccaatatgga cgaatttttg ggg 474

<210> 1651

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1651

acatacacac agatatacat acatacctac acnaacacac acacatacat cttttttttc 60
ttaggtatgc caaaatgttc agagggttt gaaacgtaaa gatatgtaaa aaatacattt 120
tcattttgtt gcgaacatac cctactggaa gtaataaaaa atgontgaat caagcacagt 180
aatgggaaaa aattaactaa aaggttagtt atcgtataac taaattaaat caaagggtg 240
ntttattatt tacagtttct caactacaaa ctatataagt caaactcaaa aaactataaa 300

tacttattcc aagaaattaa taaactttta attcaatgaa taataaaaagc atttccctat 360
 tattingcttc aataattatt ataaactatt aaaaccattt atacattggt tataacttac 420
 aagaaagcan cttaataaac ttgaaatctc taataaaca catingcaag actttntaat 480
 ccatcaaaaa atacttgaca 500

<210> 1652

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1652

acatgctaag tatcaaggat gacgctgtat gtgaaaaaag tgagtgtttt ccgctttcct 60
 gttgaaatct ttcttcaatt ttctttgcta caaacttcac ggagttcgag acctttccaa 120
 cgaatgcaaa agattcgtgc gttctggagt tatatcgta ggaaggaaaa cccgtcttat 180
 ttttatataa tagataatat atactatatt attatagtaa tcgggcgtaa catcaataaa 240
 aaacatgaat tttagtgtta aattagaata ttaactaatt tttcgactga atgagggcta 300
 ngaatggagg caacatatgg atgtgaaaaa actagtatga gagtttttag aattttttta 360
 aaattcatat gcttccacta gcatagcctt cattcattgg caatcaattt aactgtaaaa 420
 attaaaaata aataattttt tattaacatt attgtttttt tatgaaaact cttacatatt 480
 atttatttag ttttaatttt 500

<210> 1653

<211> 226

<212> DNA

<213> Ctenocephalides felis

<400> 1653

acttaaaaaat aattttctata aactgtttta gatttgaaaac ttatgcacta aattaaaaat 60
 attgnattga taataagggtg tgattgcat tttaatataa aacctcactt aacctagaat 120
 taagtttata cattatacac atcagacttg cttaacagca actattaaaa ataaatcaaa 180
 tatggtatat caaaaatgat atcaaagtaa attggcatat caaagt 226

<210> 1654

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1654

acattttaaa ttaaatctct aaatgtatat tttttattaa tattatttgn tatctatcat 60
 atgaatgaat tattcgtaat tgcatatac gcttaactat ttctgtttga tcaagcttga 120
 ttttaaaatt ttgagttatt atattttctgt gttcattcac tacatatgta ttatagtttc 180
 tctacacttg tctgcaaaat cattcattaa attataactc atatccaata caaatgatat 240
 gtttgtatatt aaagaactga catctcgaaa cgcaaaaatt taccaagatg accaataata 300
 tttctttcat tttcttatta tgaagaatca ttatttgtgg taatttaatt ttgtatgata 360
 accattgtga tcaatgctgt aacatttgtt aacaattaaa ttatatagtt tatgttgtat 420

cgagcatgca tntagagggc caattncac tatagtgagt gggaaaacna tgcagttgcc 480
cnaactntna cttgcatgac 500

<210> 1658

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1658

actataccgg tgcttaccgt ggcaagatga acgtcccaaa acgtcgctga tcaaattaat 60
agtcctcgtg gctaatttat ttattctgga aaatcgtgcg atttgtttgt gttcacaaaa 120
tttccgttta ccaaattttc ctctataatg ttcggagtgt tggccgccac ctcgatttgg 180
ttactattgg catgggcagc tatgctaata tttttccttc cgttgatgtt cgttggtgta 240
gcagttttgc cgggactgcc attactgatt attcgaaggg tgtgctacgt gcccttcgat 300
togatttaaa tttgatttct tcaattaaaa aatcaatttt aaataaggca gtgttctttg 360
aaatagttat ttaatcgtgt catttcatag tagttgtgat attataatttt taaacataata 420
tottctaatac attgataagt atgatattta tacatagtct tacatattaa ggtataatat 480
ataatagata tagtcgtatt 500

<210> 1659

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1659

actataattt caattcaatg catttttggt nagccaaaaa ttatatgaac catttgtatg 60
tttggttaatt caacagttat tcgctctgga ttcttttaaat tcgaagtgtt actatactga 120
tgatattaca aatctactgc aattaaagat tatttattca ttgcaatatt agtatatagt 180
aatattttatt agctctttga caaatttgtc tatcaaaaata attaaacctt ttcaataaat 240
ttttataaga tacatagttt ttatctcttc tacttaataa aattacatca ttatttgaat 300
taagtgggtt atataagtgc aattttactt atttacaata tttttctttg aactcattaa 360
aataaactca atctctaatt ttatgagttg tccatttagt atgaataaat atgaacagtt 420
tcttgaagggt ttttgatctc ggccatacca ttttttcata tattgtctat atacattttt 480
tacaatgact atatatcata 500

<210> 1660

<211> 343

<212> DNA

<213> Ctenocephalides felis

<400> 1660

actagattat cctgatactt ttgcgccatt cctttcgcca tagaactagc aactaatttc 60
tcaccgggaa tagcaaactg atgtgaagca ccacgaagt tagattcttt aacaacttgc 120
tcattttcta gttcctgcag tttattataa tattcttcgc ctttcttact tttgactgtt 180
tgotgccatt ccgtttccgc ttgcttaatt acttttggtc tcaaagtgtc tggatttaata 240

tcaattcctc cttgttgagc caataatgct tgtctttctt cgaaggtctt ctctaattca 300
gttctacac gttctttttg atattgtgtt aggtcgtagt cgt 343

<210> 1661
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1661
ncttgtgcaa aagcaacatt ttgacattat angtnnggan attgaactaa attnaattat 60
aaaantatna ntnantggta aactnacant attgaacatg ttaatnttat attccatggt 120
tagcaaagaa gctcctaatt taaaacaata annnnatncn tgcgcnatca anctttcttg 180
gttgngcatg aagtgtgatc attaaattat aagtattctc aagtaagatc tgaaaactat 240
atcaaaaatg tataattaaa ctaaaaaanat atatttatta tataaatntt cctatngcga 300
cantanncan tttttaatnt naatgagnaa tgtatnaagg tgagnntntg ctctgtgcga 360
tgntatnggn cnttnagana attnaagaat tatggtaant attntngaag ggattgcntt 420
atngnttcct aaatgncctc tggtagttn aaancttgta tgantngaga cacagcaaca 480
actgttgctg nntttatatt 500

<210> 1662
<211> 334
<212> DNA
<213> Ctenocephalides felis

<400> 1662
acactgcaaa atttcaaagc cgaatatctc gaaaactaat agaccaagtg tcataaaatt 60
ttcacagaat tttactaaca ctattgtgca taaacactat gagtttaatc gaaatccgag 120
atgataagac tttttcatca aaaaattttt agngtatttg atcagattca tttntnantt 180
tccggcgggtt ttaaccagga aagcatacga gtattaaaat aattattata tggcgttata 240
tctogctata tgacctacaa ttaatttoca attnggaccc tntatctgcc ccacacgccg 300
agcaatcgtc aaaaaagtga gaattttttt tggt 334

<210> 1663
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1663
acttaaacca agaaaaaaaa aaagctttta gcctggcggtt gacatataga gaccataaga 60
tcgcaacacg agaacgatgt ctggacattt tcgaactcac atatactagc caccgcggtt 120
gtggcgctt aaaaacgtag ggatgaaatg tttacacaaa aaaagagaca taaatattat 180
cttgctgcgt tacttaaatg tctatgattt gaaatcgaat tctaagagaa aaggacttca 240
acgatattctt acccttgcaa tatgatattt taaaataact ttctttaaaa tatttacgac 300
tatatatata aaaaaaaaaa aataaactct actcacaaga acgatttcca tgaaacaaca 360
cttaactgta taacataact taatgtatct ggcaatcatc atagattttt aaaaaaaaaa 420

aaaaacaaat tattttatgt attggtgttt acgaaaatga ttatgaataa cacaatacac 480
 taaacaattt caataatgtc 500

<210> 1664
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1664
 accgtcaatc actttataag tcctttatat acttgaatat aaaaatgaag caaattgcta 60
 ataaaccttt cctcaaaaac atttgatgaa gagatttcga cttctcaatt tagcttcaca 120
 attcttcaaa tagagagtga aattacactg tagagactaa aacagaaacg aggcttttca 180
 tattttcacg aaacaatgat tacatattgt agactcatgt tcggtaacat ctattctgca 240
 taatcatgcg attagttggt ggacacagac tgtagatgtc ctatactttc taagaatttt 300
 tatcgaagtg cacaaactag ttacattctt gaccaacaaa tatattaagg gcaggaacgt 360
 gaactaatta ttgatctgat caatagcttt tccctaatac ggtgaacgtg ccctattaac 420
 ttataactgt aatcttgtaa tgctcttact cggccataaa ataatgatgt ggaaaccgaa 480
 gactaaagcc taagcaggtg 500

<210> 1665
 <211> 433
 <212> DNA
 <213> Ctenocephalides felis

<400> 1665
 acacaacata ttaagctaag gaactcattg nnaattgac ntatntatat tattnataac 60
 taaaagtctg ggagtttaca tatattaatt attttataac agcttgctta aanttgactc 120
 gttingctatg caataantac ctaattgcaa tttaaagttt agatctcgaa cttcacanat 180
 cntctatta aaagntgttt acagnanttg gttnggatc nantgnntgg caaantaata 240
 nttnaatatn tgtatgnnag atttaatctc cantcatnat cttcatgnat tcatcgaaan 300
 cgacagttcc tgatccnna gtatngattt ncgcgatgat nccntccang tcggacgagc 360
 tgagtntgcg ncgagcgctc ccaagatctc cttcagccgt gctggntgtg angnaaccgc 420
 nocttcgtgg cgt 433

<210> 1666
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1666
 acttggtgcaa aagcaacatt ttgacattat aggttttgaa attgaactaa attcaattat 60
 aaaaatatta ttaattggta aacttacaat attgaacatg ttaattttat attccatgtt 120
 tagcaaagaa gctactaatt taaaacaata aataaataca tgcgcaatca atctcttttg 180
 gttgtgcatg aagtgtgatc attaaattat aagtattctc aagtaagatc tgaaaactat 240
 atcaaaaatg tataattaaa ctaaaaatat atatttatta tataaatatt tactatagcg 300

acaataaaca atttttaata taaatgagta atgtattaag ttgagttttg ctcggtcgaa 360
 tgtttattgt ttatagagat aattaaagaa ttatgttaat gaaaatgaaa tgtaattgaa 420
 tattgcatta aataaattaa ctctgggta gtttaaaatt atgtatgatt tgagacacag 480
 caacaactgt gctgcattat 500

<210> 1667

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1667

actatacttt gacaaatagt ttatcatgta atntactaga ttaggatttc aaataattta 60
 taaactggat atacttctac tnccaatatt tgaatatgat atgaatgcat gtgtgtatgt 120
 atacttattg catattaaga tgcattaaca tagaattaaa tctcttggtt acgtatatnt 180
 aggatatcat acatactcaa aatagtgata tttaacaata aaatataatt ttcttaaacc 240
 tatattaataa tataaataaa tagtaacnac nttaaaataa cctggccatn attnnnagan 300
 ttgntnttcc ttttatnggc cntattann nnatncnttt caaanttggg nnnngnaatn 360
 cnngcncnna cttttatnaa nanantaann ttatgggcnn aanttanncc nnttggcnta 420
 tnngtcnant naatattcca ngngatagc atgttgggcn ngcctantca gcaaattngc 480
 ctanattggc atgttntaga 500

<210> 1668

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1668

acatacacta agtcatatga aatctcggca agcgttaaaa gcacaatact gtcagttctt 60
 ttgaatttct aaatttttaa actttacttc gagatggacg aaaaatgttc accatccaat 120
 ggccttaggc aataagaaaa attccaactc ttttctaact tgtttgccat catctctctt 180
 cttttcaata agaattgaaa agttataaat ttagcgtgtt tttgaatatg gaatagtgat 240
 aaaaagtctg catttttggtg atatagtgtc tttgcgtata actgcgtttt gcttttgaaa 300
 aagtagttct acaagttaat agtttacatt ttagattgaa ccggttcacg agcgtataac 360
 tagtaaactc tgaataattt tctgggctga aaattttaat gtaacaaatc gacaattttt 420
 tagctaacca tgaattttga attttgaata attaaagtta ttttaatcgt cacgtncgcg 480
 cccactcgtc tttttggcca 500

<210> 1669

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1669

catgtcaata gttagcatat gtattaagaa ttttaacataa taattnaaac atcaatnaaa 60
 acaatataaa taaataaata attttngtat atcaataaca aattttcttaa ataactaatc 120

acatttataa ccagtcatt gttccttata tttatttttc aatatatcac tgcctccaa 180
 ttataaaaact ttgactagac ctgataaaat attttataca taaaaatact ttgnttatat 240
 caccaatagt taaactttta aataatttca taatcacaag tgctatgata ttaaattaga 300
 agcattttaat ttatataaac atattaatag taaatttatt atgaaacttg gtaaagttaa 360
 taaatacaca ttaataaaaat tcttttccaa tatatgcttt tttcttcgaa atgcctttcg 420
 atgaatatac attctaagct tctttccaat tcgtatccgt ccattctatc ctctgacaca 480
 aaattaattt cattccntc 500

<210> 1670

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1670

ncaaactga ccatttttca cgtgacggtg cattgtggtt ttttgttatt aattttgttc 60
 ataaataaca tttcttgat ttgtcaaaaa acaattcggg gtaattgttc ttatatgcaa 120
 gtttcaatta ttttatattt tgggttatat accaattaag taaaatccac tatttttttc 180
 atgtatctct accatttatt attttatatc ccttgtagta attacgcaga gcaatgtaa 240
 taattcagat attatttatt cattaaaaca tgacagattt attctcaaga taaattctcg 300
 acggagtgtg atattttcca ctataaaagc tgtaaacat ttgtaaaaca ttcattattt 360
 acctagaact actgctcata ttctatttaa aaataaatcg taagattatg ttcatttgca 420
 taataaatat tagcaaagt tatagtatta taatngtaa ttatttgcatt aaaggngttt 480
 ataagtaatt agttttgtga 500

<210> 1671

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1671

acaataagga aaattttgca agcgaaagt tttggataaa ctgaaatatt attatgttaa 60
 tgtttcatac actctacaac ttattgattt ttttttctt tttttgaaa tgatttttag 120
 agtttgagtt ctgaatattt cgaaaaattt agaacacttc aaaagttttg aaatattaat 180
 gatgaatgtg gcatgttctg taaataattc aacaaactaa atattttata ctagattota 240
 gttggataaa aaataattcc tgatttataa tatcattacc aaaatttctc taaacaattt 300
 accgtaggca aaattttggt agaatatttg tgttttttta gnaatctcaa aanggnataa 360
 attcccaaaa attcccattn ttggggantt nttntcttaa tnttgaana aaaatggngg 420
 tttnttcca anatctttna aaaggggtta attanttccc aannggggtt tngnaataaa 480
 nattcaaaat tttgncctt 500

<210> 1672

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1672

actaattgat tattgttatt ctgcaagata tgatgttccg aattattact gttccaatta 60
 attcttttac gaagtataac tcatatttat ttttactacta acatacttgt tactctctag 120
 acatgttttt gtttgcggtt tgcgatttaa ttacttgtgt gttttgttc cactgaagaa 180
 gagtcaaatt ggaactcgaa ccgtatggat ctaataaatg tattttaaga aacatctctt 240
 agttttcttt ctattcatta tctggataga tgactgttaa aaagtttgtg ttatctataa 300
 attaatttct tgaaggcgt aacatcaagc ntagagcggg ggtaggtat tcnannncan 360
 aggggggaaac attatttgaa acatatttgt aattttcgta tagaaaggga gtatcagttc 420
 gcttattaat actaagtttg gctaagaaaa taaaaatcga ttccgcatag cgctttatga 480
 gactttcgt catgataaaa 500

<210> 1673

<211> 441

<212> DNA

<213> Ctenocephalides felis

<400> 1673

aaaaaactga ggtcgaagca taagtcgccc cttccactat cgcttattaa ttatactttt 60
 actatgtatt ataaatgaat tgaaaatatt ttttatctca aatatctaaa ttgttacatc 120
 tatacaggcg tttatcaaca tcaacagtag aatgcctttc tgatcttttg taaaacaact 180
 tatattatca actgattttt caaaactttt gtttttttct atctgatatg ttttttgata 240
 taacatgtta atgattgata taacttcaac aataaatgac atcatatttc agagaatcag 300
 ttgccacaaa aaataattta ttaatatgt atgtttgtaa atttgttaag aaaagaaaag 360
 caatatcttg aaaacatata tgtatataat attttaaaaa aaaaaagnnn nnnncnnnna 420
 nntntnnnaa anannaaaaa a 441

<210> 1674

<211> 262

<212> DNA

<213> Ctenocephalides felis

<400> 1674

actaggcaaa tcaatattat ccttttcgca ttcagagttc tgcaaaacac tttccgaacg 60
 taattttctgc atttcccaaa aaagtcttct ataaaaatgt ctatctgaca cagtcgcaat 120
 gtgtttgcga atttttttat cagacatatt tatttataca attttttttg acaaattaca 180
 gagtcaaaaca acaaacaaat tacgaatata ttatattcta atattgttta gaatttttagt 240
 agcataagta tacgtataca gt 262

<210> 1675

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1675

acatttaata aaatttattg taaggttctg taggagaatg gaaaacgata ttgttaatac 60

aataaaatac aaaatcaatt ttttaaattt atcatcatat aactgcaa atactaacatat 120
 attttttcaa ataaaaataa gttgcttttt tgggtctcct taattaccct tcatatgaac 180
 tttatatcaa atgaacattt tatatatgga agcctttttat ctgataatag aaaaaaacta 240
 tagttcaaaa gcttttaggag aaagaaaata tccaatgcta tgtcaaaaatc tttttcggaa 300
 tcttactttt caaacacttt ttatgcttgc atatgcactt tgtgaggaac tatagcagga 360
 gttgaattat aaggattgta atgcaaaatt tataatttca aatggccata gctaacta 420
 aaatcaaatg ttgatatttt ctaaattttt tccaaagaaa ttcaatgaca aattttgatg 480
 gttgtgtaga atatagatca 500

<210> 1676

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1676

acttaagaac aaaaatctgg taatcatttg tgtgaaagt taataggaca aatagaaatt 60
 tatatcattc taagtcattc aataaatgct gctaataat aattttcatg aataactcat 120
 caaaaactaat tcagatttta atgattgaac cgttattcat taaagcaatc gttttctact 180
 aatatgaaat ttgcctttca actaaatttc ctttataagt tcctttgact gcaagatata 240
 aagagaaaat aaatgacatt ataattgttt atgtattcct atgtgagcca tttgcagtat 300
 tcgatataat actcataaat cagtatttaa atctgagacg cctgctccat gtcataaatt 360
 atgaacagtt attttcctca aatcctacac agtaattatt tgatatttat atagatgata 420
 taaataaaat atctttaatt tcgttttggg taatatttta tggaagctga aatcaaaaac 480
 atctgctaaa ataattaatt 500

<210> 1677

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1677

ctggtaacga ggaaacacta tttttaagag cagaagaacg cgattattca aattttaaag 60
 agcacaaaatt tataccaaag caagatggca aaatcatgca agtgaagcat aatggagcta 120
 gtcatatata tttatatattg ccagccgata ctgatttgaa agatttagat tcattatttt 180
 ctcatggaga aaagacgctt ggagactggg aatcagctac cgatggatat ttctgtgatt 240
 tggatgaaac caatgaagcc aaatcagttt gtattttctc ttcagaagat acaacaaaag 300
 tgaatcaatc tgagctatta gacgaattcg aaactaaata tgtcaatgaa tatgtagata 360
 aaagaaagga aaaatgtccc aagtaacata aattatattc ttacaataac ttaatacata 420
 tattaaaatt tttgtaacag tttatgtgta tgagttttaa caataaatta ttaaaaataa 480
 gattttnaaa aaaaaaannn 500

<210> 1678

<211> 330

<212> DNA

<213> Ctenocephalides felis

[illegible]

<210> 1685
 <211> 377
 <212> DNA
 <213> Ctenocephalides felis

<400> 1685
 accaaacggtt aagttactaa cagaactttg gaaataccta cagttaaaat caaatttggtt 60
 tcacgcgcac ccatgctcag aatatcaaaa ataataaatg aatttgcttc tgagattaat 120
 atctttgggtc tgtcgatgac aaatataaaa aatcaagcca gaaaaattat ccttaaaaaga 180
 ctgtcttaaa tagtgattta tagtaatttg attaaatggt taattttatt agttttttatt 240
 taatgtttata tatttgtagt ttatattaag tggtatgtat atatacaaag ctatctatga 300
 actottaata ctctaatttt ctcacatatt atctctttaa tttataattt gtagacttca 360
 aaatgtaact gtattgt 377

<210> 1686
 <211> 333
 <212> DNA
 <213> Ctenocephalides felis

<400> 1686
 gnncntttat caagtagatc cttattggtt ttaataaata ancataaaat tattctacat 60
 aatgtcttca nngcgccctt ttgttagaag caccgtaaat cgcatgaatg ctgttcgtgg 120
 acaatgtaga aacagtcctt acggatcatc tggacctcca gcagattatg ttcctccatc 180
 catgaatgag ctaccaactc cacaaggatc ctggcaagct aaacacgatg cccgccaaag 240
 gaaatataat gcaacccttc ttgctggcgt tgggtgtctt actggaactc tcatttttat 300
 gaaagcaaca gggttcgact tccactacta tcc 333

<210> 1687
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1687
 acattttactt ottacactgt atctggaaaa aatactgatt tacgctaact aattttaagc 60
 atagtgggtt tgttttgact tatagtataa atacatgaag cattactcaa aagggatcta 120
 gtocacaggc aagattttta tttacagat tatagtaatg cgaaaagatt tagatctgcc 180
 ataaagtaac tgaaatggcg aatcaatctc gcaccaaaca gtattttttc agaccgttat 240
 aagtgccatc aatattatgt gottcgtaat cgcataataa atctcgagat agaccagatg 300
 gctccactta gacgaattta tacgagattc taaataattt attgtctatc aacctaatca 360
 tatataaagt taataaccca attcagtttt ctgttaactg tggcaaagt ttgttttagg 420
 gaccacacct aaccaaggaa ttcggttgag aaatccacac gttcttggtat tatctgtggc 480
 atcaaaaatg aaatatttta 500

<210> 1688
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1688
 actaacattg ttgttgattg tttctatatg tgactaacta ttggttgaga ttaaaaacta 60
 atgaactgac ttctctcctt ttaacttccc gtagggtaag ttatagtaat cgcaaaaaaa 120
 attttttata tttcacgttt cagaggtttc taaacatttt gaaacgtaaa gatataataa 180
 aattttcatt ttcgattttt ttttttgoga ttactataac ttgccctatg ggaagttgga 240
 aaaattaagc tatgtatata catttttgaa attgattcac gatttttgga caattttaca 300
 cttttctgat aattataaaa aaaaccgctc gcctgatcgt tgcgcaaaac taataaacgc 360
 taactcacta agttaaataag aatgggtttt gtttttttca gtagaaagga gaaaacttgc 420
 ttaactacac tattttctaa atttggactt attcgattca gaatgacttg aacgttgatg 480
 aaacctaata ttagcccatc 500

<210> 1689
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1689
 accgccacat gagcactaag ggagcgccaa ttaatcacgt gatcgatttt ttttaaggatt 60
 tttaaacctt tgcccttggt gatacgtggt gatatccaaa aattttctga tatttttcac 120
 ttgtgaattt agactgntga aaaattttaa agtttactat tgtttcatca tatcataaaa 180
 aattattatc tcgctcttca ataaaacatg gatttaaaaa ttgaaataga agatccaagt 240
 taaatgttgc attatcatta tttaatccag caataaatat atctgcacca aaatttgcct 300
 caatacaatt tgtattagtt gcaataaaaa ccacccctat aaatttcaaa aatcacttta 360
 ataatatcga ttactaacga ttattatttt taatctctta atcataggat taaaaggnca 420
 cgtagccgga gtcacatgca tcgccaacta ccggattagt aatagatcac atagaattag 480
 aaagaacggc catttagaag 500

<210> 1690
 <211> 110
 <212> DNA
 <213> Ctenocephalides felis

<400> 1690
 acaaactttg taaaaattta gttaataagt tacttgtaag ccatttattt ataacattca 60
 aaacatctcg taagcaacat tttaatggga aaattatttt accctcacgg 110

<210> 1691
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1691

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acgagtagta taatattttg aatttattaa cgcagcaatc ttgacccaat tatctggtaa 60
aattatactc ttttctcttt gaaaatatac tgtttgtatt tcaaaaaagt atgcatttca 120
cacattttat gagtagttgt gtgaaacaat tggatttcaa attattttta cttaaaaggc 180
taataattat atattatttg atatcaatat taagctgtag tgatatccat tttcacttga 240
tagattacaa tgtaatttca agtaaaaaata ttctaaaaaa ggacccattt attataatat 300
gttattagtg ttagaaaaaa actgaaaaat agatcaataa tagataaaac aaccggattg 360
cctcctaaaa agtcacgttg ttaagtcact tgcttacatt tttagctcat agaattctca 420
tgttctgatt gatgttcaaa aaattcaacg gtttctccgt agatcagtgg tagagctttg 480
ggattcaatc taaatccaag                                     500
```

<210> 1692

<211> 351

<212> DNA

<213> Ctenocephalides felis

<400> 1692

```
ncgcgttgta tttcacacta gatcttgccct gccgagcatg tttttatttt ttacaaccaa 60
cagtagntta tatgatagat gcaaatattg aattaaacaa aaatcaaagc catagtttagg 120
ttacatccta aaaaaaattt tggtaaaaaga taatacaaaa tatcttagaa ttcaatccga 180
gtcattgaag catttattat tgattagcaa aaaaatatga aataattaat aaatattcca 240
aatcaaata tagaatctat ctatatattga tatcaaacac aataatactt tacaagtatg 300
ttcatatcag ttttaactta tagaattttg ataggaaaaa tottaagaag t          351
```

<210> 1693

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1693

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acnnagtagt attgaagatc ttttgnccctc tggtagattnt tcattgacta tacagngtnc 60
anncttgttt aatatctgaa nnataaanat anatatatat aattatcaga ggtatttata 120
ttaataatat atacctntga aattatttca gttcccatag aactccctaa tttattataa 180
agctcgccga gatttgaaaa tgctgatgat cgaaccacaaa aatcctcatc atgtgtgcc 240
ctcagaaaag tattaagaaa tactgtttta tacttttgga caattgattt ttctggaaaa 300
taagataatt ataaaaatcc atctctaata ttttagcaac tgaattaagc acctgcatta 360
aatattaatt ttactaatgc ttcaccaact tttaacttta gctcttcttt tccatccttc 420
tgaaatttat catgtcgatt atttaaatat tcttgtgtca gcaattcaat tcactctctg 480
gcatactttg gaaacttctg                                     500
```

<210> 1694

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1694

```

attagctgta gcagcattgc ttgagttttg agttgataac ctgcaaccta gcctgcgact 60
tctgttctat tgataaagga gaaataatta ttttatgtcc aaattacagg gtgataaaac 120
ccattgacgt caatttgaaa aaaaattcaa taaaaaaaca atggacagga ggatgatata 180
ttaatagaat gtgcctttat atcaataatt tcgaccacaa aactgcctt ttatgaatta 240
aaatgtcttt aaaagaatgt gaaagtgata taaaacattt aaaatcagaa tctatgttat 300
ttgcatgtga agaaaattcc aaagaaaaca gtgcaaacta tttaaatgga aaacaaccaa 360
tcaagaatgt gagtaataaa atattaaaaa actgtcaaaa tgtgacagct ccattgaggg 420
aaatataaaa aatagcagcg atattgcacg aaaacgatgg aagatattag caaaagccct 480
aaataaaccg gcacangcat caatggaaga tttttctgtg cgtagattca caccttcgtg 540
tattaaatc

```

<210> 1695

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1695

```

gcgogaacaa caacagttca gtgcgaattg ataaagttat cagcaaaaaa taataaaata 60
acagtaataa tacttgtcga taatttttaa cttgtgcatt tattactagt ttatttccag 120
aagtagaaat aagttggctc gactattgga ggaggtttat ttactcataa aacgtaaaga 180
aattaacatg taattacagg tcacaaatat ataattagca aatacgtaat ttagctagag 240
tcattcgtgc gtaaaactaca gcaccgatca tttcaaagga aatcattggg aaatttttac 300
aatgtggata ccgttgtttt ttatttttaa tatcgcggtg gtatacgag gaaaattcga 360
agaaatctat gcttggaag acgtagattt tgtgtggcct tctaataaaa taaaagaaga 420
atatattaaa aatggtcata catcaaggaa aataatctta tcttggaat ggccaggtgg 480
caagataagt ttttctcaca attccagatg gaaaagtgga gtacctcaca ttggctatat 540
ccacttaat

```

<210> 1696

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1696

```

gaggagtcgg tccttttagcc tggggtagag aaacacatcg aaaaccgcag acgcttccac 60
caaactctgag tccaaaattc ttccatagat cgccaagaga agcattgaga agagtcacta 120
gtctattgat caggaaaggg gcagctgggt gaggcacgcc ccgtgactcg cgtaaagaac 180
gcgagggcag cgtgttcccg atgccgcttg gacaaacggt gcatagggaa gcttttagagg 240
aagtgggtgcc taaacaaaga agaggatttt tgaaaaactt ttttaagaaa tctaaacatt 300
actcactgga ccagtaaata atcgaaaagt tgacaattta ccgagttcta tgttttttag 360
gcataagata atatgtacac tgccctcaac ttttagtcta accataatat tagcattgaa 420
tactactgta gttaccogtt ttaggttgta ggattattta tttattctaa taatgaatta 480
caattaaccg tctgcatatg gaacgaaggg gaagtaagac agtttgcaat aaaatagtcg 540
ctgagaaat

```

<210> 1697
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1697
 aattgatgaa gcacatgaca actctagctc ttctggtgat tgcattttga tagaggatga 60
 tcctattgca gatactggaa ataaccaata tcttaagttt gggaaagata ttgaattaat 120
 acgtatgggt gaatcaatgg cacagaatgt cgtgtctcct actgtttacaa ctcctaacng 180
 aggaaccatg ccaaggaaaac gaggaagacc aagaaaagat gctaacttaa ttgacgcaaaa 240
 gaaagaacaa cttgctcaag aaatgctaca aaacagtctc tttccagcac agcatatgct 300
 tgaaggtcta atgactggat ctggtgaaag cccagttaga acaagtcgta gaagtaccag 360
 aggacgatca tcagtgggta aaggaggtat gatttctacc acaccaaggg ggcgtggcag 420
 aggccgtggc tctaaacagc aagctcttca gggttcaatg gaacagcaga ggattcaaca 480
 natgctgaat atccaggaca aatcattcag cagcaagctt cgggtgataa tgccagggtgc 540
 atgaaaagt 549

<210> 1698
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1698
 ccgtaaatc atattctaaa cgcacttgcg aatactttta ttcgacattg taacgttgac 60
 tatgcttatt ctgtgagaat tttcatgttt tccaaaaatt ttcacaaaac tgaaagagt 120
 ctcccgtaaa ttcacattct aaacacattt gccaataactt ttatgagact ttgtcactta 180
 gactgtgctt atcctgggag aattttcatg ttttccaaaa atttgacaaa aagtgaaaaa 240
 gtgcttcagt tcagtcacat tctaaacgca tgtgtgaaca catttgtagc acgttttcaa 300
 aaaattttca caaaattgaa aaaagtgttc ccgtaaatc acattctaaa cgcatttgct 360
 aatactttta tgctactttg tcacttagac tgtgcttata ctgggtattt tttcacattt 420
 tcaccagaaa aaaatgtttc gcttcacaca tacttggaat aatgctcttg taaatcagat 480
 tggatatttg tcttttggag gtgggattgg tgnaaacgct gacctacaca atcgtgctac 540
 aactcatat 549

<210> 1699
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1699
 atttggtcgg tgtacgatgc ctccgaagcg tctttgaagt ggtcaatgtt catggggctc 60
 aactgttcct ataggctcac cggccagttt gccttacgat cagtaatgaa ctagaatcac 120
 tttaaatacc ttgcatcaa acaattttta aatagtacgt aatttacaat tgtaaacaaa 180
 attgtcattg tatatactta tatgtgtata tgtatacaca tatatttata tagttattta 240

<400> 1702

aataacgctg ttgcnnttnc tggaactgta ctggcagcaa agcganccgg cgcgggcggaac 60
 agtgggttgg ctgcgaatgt taaaacgtct gcgcaaagcg cgggaaccac ggcctttacg 120
 ctttaagtcca ttgcatatgg atgtccacgc cggaaattta gtgcatagcg cgtcaggggt 180
 aaaactcatc gactgggagt atgccggaga tgggtgatatc gcgctggaac tggcgggcgg 240
 gtgggtggaa aatactgaac agcaccggca attggtcaat gactatgcca ctgcgcgcaa 300
 gatttatccg gcgcaattat ggcgtcaggt caggcgatgg ttccctggc tgctgatgct 360
 caaagcaggg tggtttgagt accgctggcg acaaacggcg gatcaacaat ttatcaggct 420
 ggccgatgac acctggcggc agctattaat ttcccgaga catgaccctt ttagcaactcg 480
 gtatcaacca taaaacggac ctgtatcgtg gaggggggnc cgggcccaat tcgcctatag 540
 tgagtcgat 549

<210> 1703

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1703

gctataccca ccactagaac ctgatcctgt ctttagacgg agagtttttg ggcctgattc 60
 tattttaaac ggaacacca aagataaagt agatagagta cggggaaatg attcaaaatt 120
 agttataacg gcaatccaag gtttggttagc agatgttgat caaacaagag ctgctgtaca 180
 aaaccaacat attgaagatt caacacgaaa tactagtgtg gaggaccatg tgcattttaa 240
 tgggaatatt aagaccagtg acttagttaa atcgaaaaca tcagaccoga ctattaattc 300
 aaaagttcat ggagaagtag aacataataa aaatttcaca caattggatc aggaaattga 360
 agacaaacct acagttaaga ttttgggcat ggagatgact acgcagtgcg aaggtggcag 420
 aaatttagtc aaccaagttc accaattcct tatcagctcc aagaccagaa caattgtgcc 480
 atcaatatat ttggaggact tcccataatc cagttttggg cagaattgac cacacagaat 540
 tctccgttc 549

<210> 1704

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1704

agaatcagct gtcacttata ttggttacat tattctgtat attttcaaga tgcttcaata 60
 taaatattat gatacgccag atggccaaga tttaataaaa aaattattta taactggaaa 120
 atatgctact ttaactggct taggcattct atcattagat gtgcttcttt attcaaagcc 180
 taaagggtat ttggaagcat taggaagata tgcaacagtt acggggcctc ttgtgggaat 240
 ggctgctgtt tttaacaattg gtacctatgt agctaccaat gttcgtgaaa aagatgacta 300
 taagaattat gtagttgggg ccacttcagc tggttgtcta tggggcgctt tacgcagaag 360
 ctatattaca gcagtattca gttcttttagc gttttcacta gctggtgtta tcaagaaaaa 420
 ggcaatagag aatgattata cattatttcc tcacctaga gacattttgt ggtcattgtg 480
 gagccaaaag ccgatttact atcttaaaag acgccaaggg tggcccaggg gaaaatgata 540
 acataaatt 549

<210> 1705
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1705
 agattccttag tgcgatatag gatataacat cacaattagt gaaattgatt tgaagggaaa 60
 aatgtcggaa acgagcgagg gcgtccatcc gttggtatgg tccgcgggtt tcattgcctt 120
 taccctcttg ttggcgcaag tatgccgcat ggccgcctcc aggacgcagc gcggaatgat 180
 ccgatccttg attttggaag gaatcgccgc cgctgaactt tgtgcttcct gcttcgaatt 240
 gatcatagtt gccgacaact acggtgtatc tatgtacgct attttcctgt tcgtcctgac 300
 gatatggttg tccatggttt ggggcgatgc cactgcctgc ccgtatacgc ttctggaaga 360
 tgctcgtgaa gacaaagcta cattgcgcga agctgactga aaacttgggc acaactagtt 420
 ggcggtgtct gatatttcgt atgtcaatta ttttgggtatt tggagcttct caacgcatac 480
 aggaagagca tttgaaaact gacggtgatt tacaggatc tctatgctag gaacgnaata 540
 gaagattgc 549

<210> 1706
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1706
 gagagagaga gagactgttc gaggaagcaa tgaaaagtcc acttaacgcc gaacctgtaa 60
 ataaatcatt ccactcagtat ttgaagccgt ttttgcaatc caatctgtga aaagaaaata 120
 ttctacattt ttctagataa agtggaatga attgaaaata ttaaggagtg cacgtgtttt 180
 gttttgcgaa atgctatatt atctgtccat ttatacacia gtattcagag attaaaaaat 240
 caattactta aatcttattt tgaatgccac atatttatta caaagggtt caactataaa 300
 tttatttttag atatatactt atcaggatat acctgataat tatgtctctt ttctgagcat 360
 ataatgatgc attcacaana caattttgaa caaaattaga aaaatgatat aaaatgtaaa 420
 tgacctattc ctaaatcatt gttcatatt atttgcctc ctttttttcc cagcggttta 480
 ttatagtaat atgatttgtg aggaatttat cttaaggagc atttgtaatg aattagaagt 540
 gttagatca 549

<210> 1707
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1707
 gagagagaga gagagagaac tagtctcgag ttttttatgt cgcgtttttg tatgtgctat 60
 aatttacatg ttgattattg aatcttggtc ttccatttat ttgaaaataa aattcatatc 120
 ttagttattt aataataata acctcaaagt ttatgacagc cagtttcata acattgctag 180
 tggtagagat tattagttag gttttatcag atagtgcacc tcttaataat ctgacagcag 240

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aaaaaataac aaaatatgtc agattcogatg tcacttcatt ccacatcggc aaaattgatt 300
gtggaaaatc ctttatggga gcaaaatacg ttcgttggtc ggttccgtca cttcttatgg 360
atgaccgatt ggcgatcctg ttttgcttca gaacgtgatc tcgataaagc agaagagttg 420
ataaaaaaat gcaaacgcgg tgaaggatgc ggtgatgcgc aagggtgcgc ttgattaccc 480
aagagctata tgaatcacct tccccggcac tggagaaaaac aaatctttcg accatgtatt 540
cagtgcccg 549

```

<210> 1708

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1708

```

ataaaatgac aaactctcttg ataatcgcgt cgcaaaaaaa catttatcct ttcaaaccga 60
tcacaaaaac acctaaatta accagcattg tgaataaagt gtaagaaccg acacaagact 120
attaatacaa tgaccagtgt caatctgaca agaagatgtg tcctgtttgg gtggaagcat 180
tttgccaaaa caagaaccaa cagcctcata tactcttccc agagacaact tattacacct 240
gtgccccaga tatctgtgtt gtcttcaagt tttatcaaaa gcagattcta ttcgacacag 300
aaaaatgaac agagtgtctat gaaaccagac gatgatgatt ctacggataa agacaaggat 360
aaggaagctg ttaagaagga ggaggatgtt aagaaaatgg gtttgtaag aagtttaaac 420
aaatgtacag ggattctgga tgtgctgatc cggtgcatgt tgcncttcta cgtgctgggc 480
tgncatattta ctcccgcaaa agtgggtgtg tgtgatagca tcctggatcg tcaagcagtc 540
tgactatcg 549

```

<210> 1709

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1709

```

cttgaataac acatcacaca aaaataaaat tatctagtag taaatattct attttgttta 60
tcaaaatgtt taacataact catataaaca ctataacaac ccaagaattt tgcgaaaaat 120
tcaacaatgt catagaacac taccoggggg ctgctgaaga catggctaag caaagacctt 180
tcggaacac cgaagatttg atacagaaat ttagtgatta tttggaaaat ttaccaaaaa 240
cagaaaaaga gctgatttta aaactgcac cagatttagc tggaagattg cttgatactg 300
gcaatctgac acctgagtcg cagaaggagc aggaggcggc aggtttgcac aaattgtctc 360
aagaggaaaa acagttgatg accgacttga atttagagta caaaaagaaa tttggtttcc 420
ctttgtcatt gtagctcgtg aaaacaaagc tgcagcaatc ttaaaccggct aaaacacgtt 480
tactaaatac aagagaccaa gactctctgc cggataataa gtcaaagcta tcagattgga 540
atcttactt 549

```

<210> 1710

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

[illegible]

<210> 1713
 <211> 506
 <212> DNA
 <213> Ctenocephalides felis

<400> 1713
 gtnttagaga gggtatttaa gattgttata ttttcataaa tatctcggac atggctacta 60
 agttttattgt aaaatgtggt attgccgggg gcatagttta tcaatcagtt gaccaaggac 120
 tatggggtag cagttctaga acaattgaac tttatgaaga tttatctaaa ctctgtggaac 180
 cagtaaccaaa agaagttaag caaaagattg agcttcacaga tttgcctaca tctggtgaag 240
 ttggtttcat tgcaacttat tattggaatg cagggtgtgaa agctacattt gcatttttaa 300
 aagaatttcc aacgaatact gctcgattgg gatgcaaatac ttataattat attgtaaatac 360
 atcctgaaat aaaaaaattg caggagcaaaa cagaaacaaa aacagaaaag aattgatatg 420
 tatatagaaa aaaatcatga ttatggatta tgtagataat atttaataat aaatgctata 480
 catcttaaaa aaaaaaaaaa aaaaaa 506

<210> 1714
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1714
 gagttttttt tttttttttt tgaaaaatat aactaagta attacattta tattcaattt 60
 acatttgtac atcattgtaa ttgactacga attaacagca atgataaaat actttatata 120
 tgtatatata tatatatattg aaaatctgtg taaaaccogt tacaaaaata ntatacanga 180
 caaaaaaaat attacatcat ggcaacctcg actgtccatc tntcaattaa aatctacact 240
 atcttttgtt tgttattaac attttcttat tggatttaat tattaattta aatgctttca 300
 atgattcaat tagcggaatc attttgcttt ggatatcttt tcacatatct cgtttgtgaa 360
 ttctgaacac ttagcggtgc tcctaaatca cctgttaggt atttggttc acggattgct 420
 cgaaggctgc tgtttaatta agtctgcgtg tttgaaggtc atgtgctcag catcattcgg 480
 aggatacaag agggcagtg ggttgctttg cttgccgctt gctgggtgnc gtgccagatc 540
 aaangcgct 549

<210> 1715
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1715
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 agtggttttt tatttaatta gtttaagtgt tatataagtg caaaatcatg acgttaatag 120
 tgaaatggct cagttctttt ctgctgatcg catccttggc attagcacia gtgaccccca 180
 aggacccgc ctgcatanaa ggcttcgatg gcaacatcca cgccctggac gcggctgaat 240
 tggacttctc ttacgaatg ttagctgctg cagttcgatc tgcacctggt caaagtgtat 300

ttttttcacc ttacagcatt tatcaagctt tgctcttagc gtatttctct agtgctaacc 360
 ataccgaagc taacttgaag aaaacattag ctatcgagga acatgtgcc aactacaag 420
 ttctgcatgg atataacttt gtgagaaaaa tgcttgata tagaacgaat caatcatatg 480
 aatcaatntg ctgtcgcttt tgtactaaga tgaccanttn ggattgattc aagctgcatg 540
 agagacaaa 549

<210> 1716

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1716

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 acctccaggt agtgagtcta tggtcatcac aacagctgat aaagaacgat atcaatgttt 120
 tggtcctaaa atctcaacac cagagtctga aaaaaattta ccatatagtg gaccaactgc 180
 gttagaatta ttggcacctt tattcacaca aactgcttgt tcatatcgtg ttgaaagcta 240
 ttggacatat aagctttgcc atgggcggtg tgtgcaacaa tatcatgaag aacgagaagg 300
 gaaaaagggtg aaaactcaag aatacttttt gggaaagtgg tctgctgaaa ggcatgatga 360
 attattggct gaaatttcaa aagcagaaaa aagctcagaa cctttgcgaa ccacaaaaat 420
 tgaatcagca gtttgctttt gtagaagtag ttatgacaga aggtctttat gtgatttaaa 480
 taataaaaaa cgagttacaa gagttctgat gttgtatgca atggaaacat gaaattattc 540
 ctaaagaaa 549

<210> 1717

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1717

aataccggtg gcgaaggcgg cccoctggac gaagactgac gctcaggtgc gaaagcgtgg 60
 ggagcaaaca ggattagata ccctggtagt ccacgccgta aacgatgtcg acttgagggt 120
 tgtgcccttg aggcgtggct tccggagcta acgcgttaag tcgaccgcct ggggagtagc 180
 gccgcaaggt taaaactcaa atgaattgac gggggcccgc acaagcgggtg gagcatgtgg 240
 tttaattcga tgcaacgcga agaaccttac ctgggtcttga catccacaga actttccaga 300
 gatggattgg tgccttcggg aactgtgaga cagggtgctgc atggctgtcg tcagctcgtg 360
 ttgtgaaatg ttgggttaag tcccgcacag agcgcaaccc ttatcttttg ttgccagcgg 420
 tccggcgga actcaaagga gactgcagtg ataaactgga ggaagggtgg gatgacgtca 480
 agtcatcatg gccttacacc agggctcaca ctgctacaat ggcgcatcaa agagggggnc 540
 cgtcccaat 549

<210> 1718

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1718

taacgttact aacaaatcgt catctacttg taattattaa gtaatacttc ataattaagt 60
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 agaggcgfff tgtatgccaa atattcatga atatgtactt atttcaagtt tcgttttttag 180
 aaatactatt taggtattgt aatagcatgg actatcattc caaaatccat atctatffff 240
 ataattgtfff ttgtagaatg atattaggag agacttatat gaatgattff gaacaataat 300
 ggttgaaata aactattcaa tcttattact ttttacatat atgtatttat ttacatataa 360
 atacatattt gatttcaatt tgattcaatt gtttggtgaa tttttgttg atagatctff 420
 ttgcagtgtt ttctcgtaag ttaattcaaa tatatgcggg cataagtaat tcaatagaat 480
 atttttctgt atacttctat cgtattcatt gaatatatta attgnaaagn gctatffata 540
 tcggtaaaa 549

<210> 1719

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1719

agaacagatt ttcaaagacg ccaatgacag tattacactt ttggctccca atgatgaagt 60
 ctttgaatca ttgactgaag aagatcttaa tgtattgttg gaggataaag acgccgctag 120
 tgagacattg aaaatgcatg tacttccaga gattttatgc tgcaccggaa attggccata 180
 acgtatggcc attccttgaa tctgtccgat ctttgacaag gccattaaat atcaaccgtg 240
 atccaaatac cgatgaagtg tatattggaa ccacaactgt cgcccaatgt gatgtaatga 300
 atattaatgg agtcatacac agagtgcaca aggtaatgtt acctcaacga cctaaagtaa 360
 gaatgcctff cttccgtcaa ttcattgtff actaagcact gattaagcgt gaatatatat 420
 tttcatatac caaataaagc cattagtttg aattttcgat atttgtaaaa tgagatgatt 480
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<210> 1720

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1720

ataaaaaata agagaaaatg gtcgtttgta gagttatatc attatcttgt cgccgtttac 60
 atgcacctgc caaatttttg aaccactttt tgaattcaca aaatcaattg gcaaggacga 120
 gtattaaata tatttctaca tcacagatta actttgcaga acgtaagtac acagataaac 180
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 aggatgaatg cggagcatta gaaagtgtaa aggcagcatc agaattatat tctcctgtff 360
 cgggcaaagt tactgaaaaa aactcagctg tagaaaattc accagctttg attaacacat 420
 catgctatga tcaggttttg ttacaggntg gtattcaaag taaatctgcg aagcctgaaa 480
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 ncattaaan 549

<210> 1721
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1721
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gcctcgacgt tctttttcga aagaacgttc gaattagggt ctgaatacat gttcaacaaa 180
gttaatgaag ggaaactgtg ggcgcacatc aaacataaat atgaataaac aacaactcaa 240
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ccaaggcttt tctggtctgt cagcgtccca tgggtgagcc ttcttgaatc ttgctgggtc 360
attgagtga acaccacctg aaaaatcaat tatgtaataa aaagtgtaaa atataatata 420
gtagtaacag aaaaaaaaaa aaaaaaaaaa aaaactcgag gggggccggg acccaattcc 480
cctataggag ccgattacaa tcaactgggccc gcgtttacac gcggactgga aaccctgcgt 540
accactaa 549

<210> 1722
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1722
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tgatggtgct ggcaaaggag gtggtggtgg tggatccatc cgtgaagcag gtggatcttt 180
cggcagaatg gaagctgcta gagaagaaga attcttttat aaacagcaac aagcccaatt 240
gaagaaactt aaggaacaag caatagatca gaaaactttc catgaggaac aattaaaact 300
tcacaaggag gctttggaga gacatgaaaa acatttggct gagcttaaga agtaaatga 360
agtttcatat atagcattat gaaaatgtta gacagtata aaaattcaaa tatttggtac 420
tatttactga attataaac ttgcattaaa gcttctataa gttattagtt ttctagcatt 480
cttaatatat tcattgcact acattagttt taaattctgg tnatnatgt atgnactaga 540
tttgnata 549

<210> 1723
<211> 549
<212> DNA
<213> Ctenocephalides felis

<400> 1723
aatctgctta atgcgcgcaa acacctctgt cagctcgctg acattccccg ccagacgctg 60
attttccagc tcagcagctg ctttacttct gctaacataa ccgggatcgc ggcgagacag 120
ggtaaactcc gccagaccaa tcggatttga acgataagaa gaggtttcac cggaaggaat 180
cagttcgtcg gtggtggtca cttcgtcgag gatcttcgag cacactttca ggacgatatt 240
gtcagtcagc gcacccaatt ccggccagtc tttaatgttc ggcccgtaaa tcagcgggtg 300

<400> 1726

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ccttcccga aaccacggcg gcagcgtgtc tgatgactga agcaccgagc ttgctaacc 180
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gggtgctgat gttgcagcgg cgtgacgatc ccgatttctg gcanccggtaa ccggcagcgt 480
ggaaaagggg gaaaccgcgc cgcaagctgc atgcgcgaag taaaggaaga gtaccantgt 540
gttgcgctg
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<210> 1727

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1727

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agttcacgga gtttttcgat acgattttct tcgttttgcg taagaaaaac aaacatgtgt 180
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tgtattctta ctacttgctt gccgcacttg gacctcagta ccagaaatac ttgtggtgga 360
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agctgtgtca ttgaatgtaa ttaccacagt gccttcgttg gggatcgga tgcatgcagt 480
catgttctac ttctattctc tgtttctaca aacagactta cacaagaaag aaagaagaga 540
agcgatgaa
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<210> 1728

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1728

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tcggatccag cgcacgcgt aaaccatcgc ccaacaaatt gaacgccagt acggtcagaa 120
aaatagccag ggccgaaaaa acagcgacat gggcgcgat aaccatatcc gctcgagcct 180
cattgagcat tgctccccac tctggtgtcg gggcgtcgc accgaggccg agaaatgaga 240
ggctggcggc agagataatc gaggtaccaa tgcgcattgg gaaaaacacc acgatagaag 300
agacgggtccc aggcaggata tgacgaaca aaacgggtcat atcgtctggc ccaatactgc 360
gtgctgactc aataaagggt tgctgtttca acaccagcgt gttgccgcgc accaggcggc 420
aaacgcgggg cccgggtacc aattcgctt agtgagtcgt attacaatta ctgccgtcgn 480
tttacaacgc gtgactggga aaccctgcgt tcccaactta atcgcttgca nacatccct 540
ttngcagct
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<210> 1729
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1729
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 aattgccgcg cagctcagta acggacggaa gaaactgtcc gggtcgttac tgtccgtcgc 180
 ccaaccggat aacgtcagat catggctcat atccatcaac cgcgcctcct gaaagcgacc 240
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 ggcagttttc agtggactgg ggttccacgc ctgcgaacgt gtggggggccc ggtacccaat 360
 tcgcctatag tgagtcgtat tacaattcac tggccgtcgt tttaaacgt cgtgactggg 420
 aaaaccctgg cgttacccaa cttaatcgct tgcagcacat ccccttttcg cagctggcgt 480
 aatagcgaag agcccgaccg atcgccttcc aacagttgcg cagctgaatg ggaatggcaa 540
 ttgtagcgt 549

<210> 1730
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1730
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 ggaaggaaaa agattagaaa attacgattg gggtcgttgt ttacgattca gtttatacgg 120
 atgcctatct actgctccca ctctgtatgg ttgggttcga ttatcaagtt caatttggcc 180
 acacaataat tttaggacag ctgtaactaa agccctcatt gaacaagtta catatggacc 240
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 agcagttaaa gaagttaaag ccaaattttt gcctacttat aaagttgggt tatgcgtatg 360
 gccgtactcc aaacaatcaa tttttctcta gtaagtgaat caaacagggt accttttgca 420
 gttgtgcagt ttgatgtgga catattctt ggcatatatg aaatataaaa atgcccgatg 480
 gaatcgccag caaacacggc aacagcctct tgggaaaaca atcaacgcct ctaaccatct 540
 ttgataagt 549

<210> 1731
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1731
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 atcggttgtt taaagcgact accggaatga cgcctaaagc ctggcaacag gcctggcgcg 120
 ctgcgcgttt gcgcgantcg ctggcgaaag gggagagcgt gacnacgtnt nttnttaacg 180
 ccgantnccn gcagggngca gttctnntcn aaaatnncan aannctnngc atgnnaggta 240
 nanannttcc nnnccggggg gaaaanatgg gggggngcct tcgctctgtn ngnttgngat 300

cnggctottn ccctggnggc aaaangngag cggatntttg cgntatnttg gtggcccgnc 360
 cncantccnc cttatngnga gtcataatnac aatacagngg ccgttttcna cagcgtggan 420
 agngaaaaac cgggtgtnncc cctattagcn tgtngaaant cccnttttcc gntngggata 480
 ataaaagggc cccccactgn ctttttcna attgcccccc natggggaan ggaatttga 540
 ggggtatttt 549

<210> 1732

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1732

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 cgaacatgaa ggttgaatgg ttcctaaatg gcaagccttt acctcacaaa aatcgtttca 120
 cgccgatata tgacttttga tatgttgcta tgaatttttg ctgggtctac cccgaggata 180
 gtggagagta tttatgcaga gcaacaaatc tttatggtat ggatgaaact agagcgatta 240
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 gcattgaaag aattagggag atggaagcag cttggcaaat tgtgccggac gaacctgatg 360
 aagaatctaa acctaattgt cacctgtgtt tgtagcaaaa ccagaccctg ccaacggaag 420
 aaggcgaatg gctagattct gctgtagagt acaggctcatc cacgtcctan agttatgttg 480
 gtagggtaat ggtacactga gtcaacggtc aagattaaat tacatatgat ggnatgttca 540
 catgnttn 549

<210> 1733

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1733

aagttgtcga catgcttgca ctggatgccg atgttgtatg cagatgtgcg ggtggaaata 60
 atgctgggca cactgtagtg gttgaaggca ctgaattcga tttccattta ctgccagcg 120
 ggataatcaa caaagactgt atttctatta ttgggaatgg tgttgctatt cacttgcttg 180
 ttttattgag gaattggaaa aaaatgagaa gaaaggtcta agtggttggg aatctcgtct 240
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 ggaatcagaa aaggggtggat taaccatttg cacaacaaaa aaaggcattg gtccgacata 360
 ctcttctaag gcaaccogta atggattgag agtgggtgat ttattgggag attatgattt 420
 gttcagccga aaatttaggc agtggctgct ttgtccaaaa atgtttcaag tcttgaattg 480
 ccgtggaagg gaattgaaag natcgcnatt tgcagcaatt ggcaccnttg taaggatctn 540
 atcgatttn 549

<210> 1734

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1734

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aatcccttaa gaaaacatta gatgacaaag atagaatggc aaaagctgct gttatgaatg 120
acattgttga gaaggtaaaa gaattgtgcc tttcaagtga atcagatgta tttgttaaac 180
aactgcaagc agattcaaac actaaagcct tagatgctgc tttaaaacaa ataaaattat 240
tgaaaccaga tgcatcagcc atgtttttct ctgttgacca agacagtggg aaaatattct 300
gtttagcttc tgcttccaaa caagcaattc aaaaaggatt aaaagcaa atgaatgggtta 360
atcatataac aaaaatcata aatggtaaag gtgggtggtaa acctgaatca gcacaagcat 420
tggttagcaat atcgcaaaaa ttgatgagtg ttaatagctg caaaagaatt tgcagatttg 480
aaatactgna aaatgnntttt acttctgcat tgttgaaaca ttinactatat ctttagcattt 540
atccgtatt 549
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<210> 1735

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1735

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gcaacaacaa cctcagaatt tacatcacca caatactagt cagcaacatc accatcaaca 60
acacagtagt aacaacaata tatccagtgc tggcaacatg aatccgcaac atgtgaatag 120
tcattctttct caccacagtc cattatcttc atccatgagc catcatcata caatgcacac 180
accttgcgtg atcaattcgg ggtatcagca tgtgaaaaat gaacctagtg aatacgatta 240
catgaataat tgtcttcctg gaagttattt cacaggaacc agtttttggt ctccccctgag 300
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ccaagccgct aaattgatgg caacttcttg aaattttggt ttgaaataag taaaaataact 420
aaagactaat aaaaaatgta aatgatatag aagtcaacat atttgactat caaaatataa 480
tgcaaaaaaa tgttgtgtga caacattgga tggcaagtag caaggcaata tcaagcataa 540
ttacataat 549
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<210> 1736

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1736

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gttttttagc agctttgtca ttatcagctc cttttctaga tgttactaat tattggtttg 120
ctgctgaaac gttaccattg aacggatact ttatgtactt agcttggaat ttttataaag 180
aatcgagacag taaaagtctt agaaaactat ttagattttc actaattcat ttacctgcat 240
tgatgttatt atttttatta aataaaaaagg aatgggtttt tacgaaagac tcaacattgg 300
aaacaccttt ggatatcgat gaacacaata aaactcaaac aataagcaat aaacctgcaa 360
aacaacacagt tgttgtacct tcagctatct tagataaaat gtaaataata tataacaaaa 420
aatgttttag taaaaaatag aacaattaaa gatattatga gaacaaaaaa aaaaaaaaaa 480
aacctcgngg ggggcccgga cccaatcgcc tataggagcg atacattcct ggncgngttt 540
acaccgagg 549
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<210> 1737
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1737
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 tgtaattttt atattgtatt tacagtatgt gaaggggtt taggccttc tatttttagtt 180
 gcaataattc cgtactcatg gtaatgatta ttttaaaaga tttaatataa tacaatgtta 240
 aaatttttaa taataatatt ttttataatc cctattattt tattaataaaa ttgttattga 300
 ttggttcaaa caatattatt tataatatta tttatttata taattttagg aataaaaaga 360
 attataattg ttaatattag attaaatttt gggtatgata ttatatctta tagattgaat 420
 ttattaagga tttgaattat tatttttaata ttaatagcat caattttaat ttataaaaat 480
 aattataatt taaattattt ttattattat taatttttta ttattaatat tatttttacc 540
 tttagtcac 549

<210> 1738
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1738
 aatgctacac tggctaccac taaccctatg tatgtccaga tgcgaagagg gaatgtggaa 60
 aagcttgtaa taccctcaag tgctaaattc caaagtttcc atccattaaa ttttgtatct 120
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 acctcaatcg ggtcttgag gtcaacatca attgggatta tgcgatcccg gtacccaatt 480
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 tgcgtaccc 549

<210> 1739
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1739
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 ggtcgtggag caaaaacaca cgaccaaagt agaaggcgat gcagctgctg gagaccaga 180
 attcatcaag cgtcaagacc aaaagagatc agatctcgat gatcaactca aggaatacat 240
 cttggaatgg cgcaaacagc gtgccaagga agaagaagat cttaaacgcc ttaaggaaaa 300

gcaagctaag cgcaaggtat cccgcgctga agaagaaaag cgtatggccc aaaggaaaaa 360
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aaagcgtcaa cgtctcgaag aagccgaaaa gaacgccagg ctatgcttca agccccaagg 480
atgccacaag aaggggccac ttccctccca aaagacagac ttcactgttt ctgccaattg 540
aagaacaag 549

<210> 1740

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1740

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aatcacaatc gttgcccctt atggtagaat tcaaccacga gactgcacaa aagatctttg 120
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caatcaacgc tgatgaagaa gatcaccaaa gaattttgga attctttggc atgaagaaag 300
aggaggtgcc tgctatgaga ttaatcaagt tggaagagga tatggcaaaa tacaaccag 360
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ggtttagtca gctccatttg atgaagtaca ttcaattcag aaaaggtggt ttgnngaate 540
tatgctcca 549

<210> 1741

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1741

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tgcaagcgcc cgactggctc ccggcattat tcttatttgc ctcggaatga tctgttacag 180
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gggagcggta tgctttacgt tgttctcaat cgtttcaata ttagaagcgg gttctgctaa 420
aaaataattg caacgtaccg gataaaacca gcgttgacca tttgcgtaac gctggttttt 480
cttaggcac atgaaataac gcacattaat gcatagtggg aagtataaaa aacagcaagt 540
actgttttt 549

<210> 1742

<211> 233

<212> DNA

<213> Ctenocephalides felis

<400> 1742

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 agtactttgc cagattgttc gtcgttcggt catcaaatcg taccgagacg gcgaaaatca 120
 catccgcgtt atgcatcgtc atattggctt cgtagggtacc gtgcattcat caccatttgc 180
 tgcacccgca gagcgctaag gcgcagttca ttcattctggt taacatactc aag 233

<210> 1743

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1743

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 gggacctgtt caagcaggat gccgattatc cgtttgtgga ctggaatttc tccggcacca 120
 cggaagaaga gttcgccaca ctgatggcta tcagaaaaag gccatctctc agcgcctctg 180
 aacaagggtca ccaatgctga gatagctgaa gagatggcgg ccogttttgc ccgttgctgc 240
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 ccgttgaatt acatcacacc ccgcgagagt cgaatcaacc aattttgttt tttttacatt 420
 ttatacaaaa tttataacta agtatataag tgttgatatt gggttgaata ttaaattgcag 480
 tatacctttt tattaggaaa ctacaaacat tcttgttata gataaaatat aatttaaata 540
 tntgttgaa 549

<210> 1744

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1744

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 accaccgcga cctaaagtca gcatcagcag gttgtcgtg taggtggagt ggatacccca 180
 cttctgggtgc ggcgtcagga agttgagcgc tttttcctgg ttgccgttgg atttctggcc 240
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 gaaatcacgc atccactggt gatcctgata cagttgctga cgaccagaga gcgtacgcca 360
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 ccagaccagg tcgggctgga gataattttg cgcggctgtg cctgaatatc gcggaacgga 480
 tcttctcgtc ttnttattca gcgccagatg cgtatggcac gaccgnaat tcgttnaggc 540
 agccaagct 549

<210> 1745

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1745

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atcgacgcgc cactaacgta ttatccgcat ccaggcgcg gctgcacgac ttgttcagcg 480
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<210> 1746

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1746

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ctcaagaata gtttttatcg ctcccccgcc cattgcagct gttgcacaga gttgttctat 180
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cacacattgt gcgcgttggt gatgcgcgct ggcgatgtag tcataaatgg tcgtttctgc 300
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tacctcaacc aggcaactgc ctaccggacg atcatcagca agaatatcgg caagcggaat 480
agcttccgta ccgcgtattc attgagtcac ggtaataaac cagcttactg caaaaccggt 540
agaggtcgg 549
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<210> 1747

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1747

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aacaaaacga agttatacga tgcgaagagg tgcatacgat ggccaaggta aaactgtttt 180
gcgtttatta aatcaagatg ccgaaatggg cctgatgatt aattcatata gtcaagttgg 240
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tctatcatgg aatgtaggaa atagtgaaga cataaatgag gcttcattat ctttatttta 360
taccttagat ccaaaattgg atgttcttgt tattgggtata gaacaagaaa gtgttaatcc 420
caagttaagg cagaggatta tggaaathtt acgccaaaaa gaattaatgn tgaagtttta 480
cctactgtgt tgcatgcact acattaaact tcttatgcaa aagcccagcg tgctgggcat 540
attcccctt 549
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aatttaataa atttctgttc ctttaatat tttatcaatt catatgactt agttatacaa 120
aataatcata tgttacttat aaacatgtat catagaagtt ttacatctga ctctgattgt 180
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aaattaaata cataaatgta tataactttt caaaatttta ttataaattc atagatgttt 300
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tattgtagta aatcgaacat ttctgttctt catctacaag atacaataaa tagaaattat 420
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<210> 1752

<211> 252

<212> DNA

<213> Ctenocephalides felis

<400> 1752

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atcggtctatt gaagctctta aggaatatga accagaaatg ggaaaagtgc tccgtggcga 240
taaggccggt gt 252

<210> 1753

<211> 265

<212> DNA

<213> Ctenocephalides felis

<400> 1753

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acanntgctt ttttcttgag tggtacogtc tgctttttct atctcgacta acaaagcatg 120
gaatatttca gctactgact cattttgttt ggcagatgtt tctaaaaatg cggctttcca 180
actatcagct aatcgtttac cttcatctgc acttatcatt cgntccatat gtaaatacgt 240
tttgttacct actaacacta caggt 265

<210> 1754

<211> 305

<212> DNA

<213> Ctenocephalides felis

<400> 1754

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gtgataccat tttttggctt ttctttgatt tttcttttagc aattcctctg ctttgtcaat 180
tttcctatca acaaactctc caattttatc cattaatttg ggagtttctc cagtaacagc 240
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<210> 1755
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1755
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gccaatatTT tcaataatta tagaaatggt gttagcatta agaattacaa gtttcttoga 120
tgctaataat tttttgtaa aaaatcaatt tgaattcaaa aagaaaatta tcacaattga 180
tgctgtgcta gactttttga actttatata aaattcactg gaagatcata aacactgtgg 240
ggcactatTT tgcatctca gcaaagcatt cgattgtgtt ccacatgaca tttttctcag 300
gaaactggaa tattatggat ttaggggctg agcccttaaa ctgatgcaat catacctatg 360
taacaggtat caagtgtgtg gaatggaaca ataaacgaag tgagatagca agattaaatg 420
caggcaatgc ccaagggagt attcttggac cacttctttt tatcatatTT gtgatgatct 480
accaccgaac attagctgca 500

<210> 1756
<211> 486
<212> DNA
<213> Ctenocephalides felis

<400> 1756
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agcaccatta aaaaatatta cgctccccg tctcgaactt tgtgcggcac aattgctagc 120
aaatcttgcg caaataacta aacgtgcatt aaatatcgcg tttgataaag aattctattg 180
gagcgattcc acaatcactc tttcgtggat aagatctcca tcttataaat ggaaaacctt 240
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ccgatcggaa gacaatccag cggacctcat atcacgcggg tgctatacac atgatttatt 360
gaattcatcc ttgtggtggg caggcccatc ttggctacaa aatccaactg aaacacagcg 420
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gacttg 486

<210> 1757
<211> 500
<212> DNA
<213> Ctenocephalides felis

<400> 1757
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atttgtgaat ttattataaa gtattctggt gttttttata ggaattgggt caattcctat 180
tgntagaatg attggagaat ggtcggatga taaatcaaaa gatggttttta tttcaatggt 240
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gctcggccag tatgttgggc ttccagttga tatgtaagag agattgtttt tatctattgc 360

atttaataat tccttgccctc tagatgtaat taatcgagaa ccccatcttg tatgtttgca 420
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 aatctgttaa tttatgtcgt 500

<210> 1758
 <211> 270
 <212> DNA
 <213> Ctenocephalides felis

<400> 1758
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 tgctgccata aaatacttga gagaaaataa taccactaaa gatgatggaa ctttttatga 120
 atttgagag gacataaccag aagctccaga gcgcagaatg acggatgcaa tcaatgaacc 180
 tataatgctt tgctgttttc cagcaggaat taaatcattc tatatgtcca aatgccctga 240
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<210> 1759
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1759
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 acgtcatcaa ctcggtgacc tgctgctccg tgacattttc gcgatccatc tccatggcgg 180
 ttcgcaattc gtctcgggaa atgtatccat taccatctcg gtccgaacacc ttgaaggcag 240
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 ctggtgcgat ccagcaacc 500

<210> 1760
 <211> 500
 <212> DNA
 <213> Ctenocephalides felis

<400> 1760
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 ccaaacgaca tcaggcttgg gcttagcttt acatttacat ttcattgtta ttaacgagcc 180
 tgcttcatta ggaataattc ttggtttttc gatgaacgtt ggccgcgtatc ctgcagcatc 240
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 gtatgaatga ccatctttgt caaccatcaa cttgtgtctt ggtgagtcct taacagggtt 420

ggatttgtga aaccaagcga ctgtagggtt aggatcagct tgaattcggc attcaaagag 480
 caaacgtttg catcatctct 500

<210> 1761

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1761

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 acttggtaat gatgcgatca catttggtact aataaaacac cttcctgata aaggtaagag 180
 atttttaacg atattattga atgccataat acggctgaag catttttctt catcgtggaa 240
 attggcaaaa ataatcttaa ttctcaagcc tggaaaaaat cctactgatg cagtttccta 300
 ccggccatt agtcttctat cttgcctctc acattttttt gaaaaagtta ttcacaaaag 360
 aatcattaat attttagaag ataataattt tatgccaaaa catcaatttg ggttcantta 420
 gacaacactg agcaaaagaa caaatacaca gagttagtga ttcatttata aagcctttca 480
 cttaaaaaaa atggtcagcc 500

<210> 1762

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1762

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 tacattcttt gtcgtttgct tgatggtttc catggcatac tgcacatata aagtctgaca 180
 cgatatggca attttcatga gagtgttctt ctgaacaata tcggcatctt atcttgcttt 240
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 tgtaaggacc tacagcacac ctaaccgaat acattgaaac gtattctggc agatagttaac 360
 ccctgaacac tatttttacc atttgcgatt tcatatttgt ttattctaag ttttttaaat 420
 gcatttgacc tctaataatt tgatatccga tctaataaca tccatgattt cttgctcgtc 480
 atgtcgggtt caacgttaaa 500

<210> 1763

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1763

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 cagacttcat caaagatcat ccatcaacac tcacacctgg aataaaaaac ttaattgcat 180
 ccttacatcg gaaaagaata ccagtatatt tgggtgagtgg aggcttccga tcaactcatag 240

acaaactcca gggtttttgga attatgacta aggagtatct ggcccatagc aatccagtta 300
cagccaatga tcctgattgt ctaactgata gttgctcagc tggcctggat aaatctccta 360
tgccagctat aaccagaccc catttaaaaa gaggtgccca aaagaagaca gtttttggac 420
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<210> 1767

<211> 500

<212> DNA

<213> Ctenocephalides felis

<400> 1767

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agatcaaaaat ggtcctttca aatagctgat ataatgtata atgtttgaga ttaggttata 120
taaaagttga atgttttttg attcctttaat aaaaatatcc atcactgata taactaaatt 180
acgcagtaat cataattaga attatgtctc tagcaacagt tattctttct cagcaatagc 240
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aaccaccgca acctcaattt ctgaaggttt gaagtcaaca cataaactg ttgataaaca 360
tgaaattgcc aactggacag cttcatcaaa tgtataatcc tgtttcttct tcagtttttt 420
ctcaagatat ccattggctt cagtttgctt tacaccaca ctaatggctc taaaaccaca 480
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<210> 1768

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1768

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gattttacaa ctcttttaaa agatagatct gtaaaagatg gtgatagttt aacattaaca 180
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agttcttccg aaattatgga cttgaaatat aaaaatggcg ttgccacatt atcgataaat 300
gaagtattcc cagaagatga aggtgtttat gtttgtaaag ctaccaattc aattggagtt 360
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gctcaggaga caaaccacct aaaatagtga gtcacttaga atctaataac gtcgaagatg 480
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ccaagaaat 549

<210> 1769

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1769

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<211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1772
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 ccgatcaaat cataaagctt acttggaac gaatcatatg tatgaaaagt taatgcacac 480
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 ctattagac 549

<210> 1773
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1773
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 acaaatctta cgtgtcaaag acagagacga atttccaatg ctgatggctg gcaacaaagc 360
 agatctcgag acgtctcgcg tgggtgtctgt tgaagaggcg caaaatttgt caagacaatt 420
 aaaaatacct tacatogaat gtagcgctaa attgagaatg aatgttgacc aatccttct 480
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 ataggataa 549

<210> 1774
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1774
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<210> 1775

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1775

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 acccacagn 549

<210> 1776

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1776

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 gtaggtagtt cgaatgatat tgtagaagaa gatgagcacg tactgagtca caataatgat 180
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 aatgacatta atgaaataga cggcggtgaa gtagaagacg agactgatat tcatattaac 300
 aaagaaaaca gttgtaaatc tgattttaac acaacgcaaa ttggagatgg ctcaaataat 360
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 aatcgtgttc aagttctgga tcttttaata aaatctctaa tattgtaatg atgaaaaatc 480
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 tcgcgagtt 549

<210> 1777

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1777

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 aacgggttgg aatacaaacg acccaacgac ggtgtgctgt ggttcaaagt tggccgccc 180
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 agtggttaca agatgttagc ggcttgcgat gatattatc gacaacataa agcagcgtgt 480
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<210> 1778

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1778

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 taataatttt tatgttttaa actcattggt caccttaata aatgtacata acttattatt 180
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 gatggacgtg gagccctagc ggatctccaa gcccatgaag ctatatcaca ttgggactac 360
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 gagcgttgta tgagcggcgg aagaagaaga aatatataaa gaagaggtaa tgaagagggc 480
 acaacaacag atcatgtgaa agtnatggca agtgcattca attatcagat gttggtggtg 540
 ggatgatga 549

<210> 1779

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1779

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 aatagtgact gtgttcgacc gcgtttggcc cccacacctg gttaaggagc tggcgctggg 300
 tgagtacttt tccggcattg ttgagcagca ccgccagcag gcggaactca attggtgtga 360
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 aaaattttac cagcggatcg ggcgcggtgg tggagagtgg cggcgtaatg cgactgctgt 480
 acttcggcgt gcacaacatt gccatgctgg cgtattatcg cgtatgggat gctgcgtgat 540
 ggtgaggtg 549

<210> 1780

<211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1780
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 tggcccaggt taaaaactgg gaaaatcaaa aggaagcaat gatagaaaga aataangctc 180
 ttgccgaagc aaatctttta cgcaatcctg acttagctga aataaaagaa aaattacaag 240
 aactttctga agaaggcaaa caattatgta ccagtatcca agaaatgctt gctgaaataa 300
 aagaaaaatc tggaagtatc agtttgata cagcttttagc tctgttacia acagcagctg 360
 caacaagcga agaagaatct gaaaatatag cagatcaatt catttcacgt gatattgata 420
 tagatgcatt tttagaacag tttgcatcat caagaaaagt tatgcatttg agaaaagtca 480
 aagctgataa aatgaaagac ttcttnccaa agaaatagta gtatcaaata atcttatgtg 540
 cctagtgtg 549

<210> 1781
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1781
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 attgttgcga taatttcgaa ccgaagaaaa tttaaataaa tccaaaccta ttgtgtaatg 180
 gcggttttga gatcgcttat tcagtgtaat aatttactaa gaaagtccg cataatacca 240
 aacagtttgc aatcgttgtc gacaocgtgt gcgtctcata tacatggaat aaatacagat 300
 tcttcaaaaa gtcaacatgt tgcaagccca gctcaagccc atgtacagaa agaccctttg 360
 gacatatcat tcaacgatca cgttgcagcc ttcaaaagta aaaagacaag tgagctcggt 420
 cgggcttcat cgtctatgca ctatgcaoct cagaatatct tgtggaaaat aatatgaagc 480
 taatgaaaat atccaaggcg atcttaggcg agaagctgtc acagcctaata gaagcttcgt 540
 ctatggcgt 549

<210> 1782
 <211> 326
 <212> DNA
 <213> Ctenocephalides felis

<400> 1782
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 acttcctcgc gcagaccatc aagccctttt tccagcagca gcgggaaatt caccgccagg 120
 tgcgcacgcg cggaggtcat attgccttcc gctttaatga ttccggctgc cagcagacct 180
 ttttgctcat cggtaaakat gccgtagcag cgatcctgtn cggctctgacc gcgccaccac 240
 gggcacactt catgcagaac gcgtttgttc tcttcgctca ccgcaaagcc agcaccggga 300
 cgatctgcca gatcatcaat ctcttt 326

ccggtccca

549

<210> 1786

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1786

cgtttacgtg gtggctctaa tcaggctttt gttctaaaat tttgctcagc tatatttctt 60
ttattggatt catittggcct gcaacttatt tagttttcaa agtatagtgg caggatagaa 120
cgtaatcata gaattttatga aatttttcat acttcttggg caaatctgtg gtgatgtgtt 180
aaatattttc aatacggatt agtgtatctg aaaatatata tttggcaaatt ttgttattaa 240
atatttagtt atcgcagacg cacagtaata cgaagtagta tttaatgaat actcgggtact 300
cttatcacag gatgctattg tatgaaatgg ggtttttagag tagtcacctc cgtctcgcac 360
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tcacacgtta attaccact attggtgaat atatatatat atatatatat atatatattt 480
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tatatatat 549

<210> 1787

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1787

ttccaaaata gnganancag ttaatttttag acaaatataa aataataaat aaatcgaaat 60
aaagtttgat gaacaatatt tattattaaa ttgcgattgc acaatttaag cagtataacg 120
aaatggcggt acggattttg aagcctttta gaaactctct tggaatttgt caagatatca 180
aaaaggcttc gacgctatct gcatttgata ttcaacataa aaccctctt attaagcaat 240
cagatgaaat tccaaaagca caatatgggg gtcgtcacgc agtcacaatg ctgcctggtg 300
gcggtattgg tccggaactt atgggatatg taaaagaagt tttcagatat gctggtgtgc 360
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atgccatcac ttcaattaaa agaaatggag ttgctattaa aggtaatatt gaaacccaaa 480
gtgaatctgc acangtatta tctcgtaatg taccctgaga aacgaataga ttatttgnaa 540
tggtttaaac 549

<210> 1788

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1788

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gtttgtccgg actgatgagg tgcggcagct gcggcgtgga gacacgctga ccatcggtga 180

ggaaaatttc tgggtagatc gggtttcgcc ggatgatggc ggaagttgtc atctccgcct 240
 ctttcaactca ttaagactgt aaataaacca cctgggtctg cagatattca tgcaagccat 300
 gtttaccatc tgcgccgccca ataccggatt tacgccatcc ggcggtggaag ccttgcatag 360
 cttcgaagtt ttcacggttg atgtaagttt caccaaactt caccctttaa tggctttcat 420
 cgcgacgttc agattttggg tatagattga tgaggtcagg ccgtaatcac tgcattagcc 480
 attgagatag catcttccag cgtgtaaatt cgcaactggc agcaccggcc aaagtttcta 540
 tgctatcga 549

<210> 1789

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1789

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 caactgctcc cctgcatcgc ccagtgaat cacttcagtt ttggtgcgc ctaaactcgat 180
 acctatacgc acggtactct ccttattttt ttcaatatca atagcgtaga gacggacaa 240
 cggattggca atgcaaggcc gccgacaatt cgttatcatg cccgctaaat ttaacgacaa 300
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 gatttcgctg cgtgcagaag agatggaaaa acagctagcc tcgatggcat ttaccccatg 420
 cggcagccag gacatggcga agatgggctg gggtcctcga tgggatcgca cagcgatgcg 480
 ttaacgcacg ttncaatggc aaattgtatc tggcgccaaa gaagaaaaat ctccgtttcg 540
 gtgataaac 549

<210> 1790

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1790

gcgagaccaa tgtcaccggc ttaacaatct atcaaatttg ccgggcccgtc gactggacaa 60
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 gtcagcgata cgctgcaaag tgtacaagt tcatatatgt tctgtagtgc tgtctgcata 180
 tcgatccgtt ttgccattgc cttgaaaacg ccataattgta tgtactttac gtagttatat 240
 ccaacttttg aattaaatgt gttttaagt tttaatgtta ttttcctaaa tcttgtattt 300
 gattagtaac ccttaatcat ggatagaagg aagctttcca cttctggtga tactttatac 360
 caaatattag ccattccaaa aactgccact caagatgaag ttaagaaaag ttataggaaa 420
 ttggcggttg agtaccatcc tgataagacc caaataatcc agaggcgtct gaaaaattaa 480
 agaagtaacc gaccatattg atactagcga tgcagcaaaa gaacatatat gacaattatg 540
 gtcttagga 549

<210> 1791

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1791

aatcggcggg ggcgcncnaac gtattacctg ggaagggttcg cagaaccagg atgcggatgt 60
cagcagcgac ggtaaattta tggtaatggg cagctccaat ggtgggcagc agcacattgc 120
caaacaagat ctggcaacgg gaggcgtaca agttctgtcg tccacgttcc tggatgaaac 180
gccaagtctg gcacctaacg gcactatggg aatctacagc tcttctcagg ggatgggatc 240
cgtgctgaat ttggttttcta cagatgggcg tttcaaagcg cgtcttccgg caactgatgg 300
acaggtcaaa ttccctgcct ggtcgccgta tctgtgataa taattaattg aatagtaaag 360
gaatcattga aatgcaactg aacaaagtgc tgaaagggct gatgattgct ctgctgttat 420
ggcaattgcg gcatgttctt caacaagaac gccagcaatg acggcagctg ctggaaaaag 480
tcgagctgcg gaggataacc cagcagactg gaggagtctt gaaagatgga aggatccagt 540
cccaattcc 549

<210> 1792

<211> 248

<212> DNA

<213> Ctenocephalides felis

<400> 1792

cagagacttc atatgctttg atggtaataa ctttctgagt cctgatgcat ttgataacga 60
aaaaattaaa gaacgaaaat taacttacaa ggcaaggaaa aacgatagag aaactatgtg 120
tcccaaaaata taggaaaaac aagaattatc aaaataatct aaatatatctt acaatgtaat 180
aaaatattat atataaaaat aaaaaaacgt catnnttcaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaac 248

<210> 1793

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1793

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gcttatctcg cccggataga acaagcgaaa acttcgaccg ttcacgttcc gcagttggca 120
tgccgtaacc tggcacacgg tttcgctgcc tgccagccag aagacaaagc ctctttgaaa 180
agcatgttgc gtaacaatat cgccatcatc acctcctata acgacatgct ctccgcgcac 240
cagccttatg aacactatcc agaaatcatt cgtaaagccc tgcatgaagc gaatgcgggt 300
ggtcaggttg cgggcgggtg tccggcgatg tgtgatgggtg tcacccaggg gcaggatgga 360
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cataacatgt ttgatgggtg tctgttcttc ggtgtgtgctg acaagattgt ccggtctgac 480
gatggcagcc tgtcgttggg catttntctg ggtgtgtgct gctggacgat ggcagcggtt 540
gcaaataaa 549

<210> 1794

<211> 446

<212> DNA

<213> Ctenocephalides felis

<400> 1794

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tatgggtagt tgtgctaata gaggagggtta ttaccattat tcatattctg tagtgagggg 120
ttgtgataga atagtaccag ttgacatata tgtaccagga tgcctccaa ctgcagaagc 180
tttggttatat ggttggttac agcttcaaaa gaaagttaaa cgaatgaaaa ccctgcaa 240
gtggtataga aaataaatta ttgaaaagga gaatattaat tataaaaaat atgctatata 300
aaaagtgtag aattatgttt acagtaatgt aaacaaat 360
ttgaaaataa tatgttcata atcctatagc agaatttaat aaataaaaac acatttttaa 420
aatgaaaaaa aaaaaaaaaa aaaaaan 446
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<210> 1795

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1795

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agatgattac tgtaatctaa attgtacaaa tggaccaa 180
tgtacctaga gactgcaaaa actttaaa 240
atttttaaat gcacacaata gaaagagaag acttggtgca gccggaaaag gtcttctgaa 300
agatgggtgta cacactccaa ttgctgcaaa gatgcccaac ttaacgtgga atatagcgct 360
cgccaagtta gcagaatata acgtgaagca atgcgaaatg aagcacgatt gtgctaaaac 420
tagacatggt cacactgggtc aaaacctatt ttttatggca ctactctcag cccataaaaa 480
actcaactat agcaaaaatgg cagttgatgg ttggatgtga agcaaagata cangattgga 540
gatataaga 549
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<210> 1796

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1796

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aaatgtcatt gcgttnctat ttttgattat ttcacagta tttcaataaa tocaacatat 60
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ggcgtcaata tgacggtatc aaacgacgaa ttagttgaat cttttaaaagc tttaggttta 180
agtgaacaaa aggcgaaaga aacgttaaaa aatacagttg ttacgaaaaa tttacatta 240
gcattacatg aggtgagggg cattattttg cccaaggag ctggttcttt aatctattat 300
gtggcaacaa aaatcaaacc acagattata gatcaattgc ctgtacttgt aaaatatata 360
tcaacatcaa aattagacac aacagttaga gttgatgcgg ccttgcaatt tatgtgtgtc 420
catttaaatg gatatacaat cgatgaattt gagaaggctt gtggaattgg gttgtgtaca 480
cctgaacaaa ttgaaaaagc agaatgagg cttgtggaac ataaagaggc aattttgaga 540
acgatacag 549
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aaaattatattt acaaaggcct aggggaccaa tgggagcagc tatgggaatt tatagacctg 300
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 acccctcacc ttctggtgga ggacctatca atgtgcagca aatattctcc cgacgtcagc 420
 gcctggacaa attggagctc accacctttg agactgtact ccccaaagc gcgtatgcc 480
 tatgaatcat gcatccagca tanggccag cattctaatt ttnaaatcac ttatggctat 540
 nanggcacc 549

<210> 1800

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1800

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 ccgatatccg ccagttcgtg gaaatagtgg gtcagcatct tggcaaaacg atcctgatcg 180
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 nttgagcat 549

<210> 1801

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1801

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 tatatgtatg tgattaatgc cgaaatctgc acagcaaaac aaanaccaa acatttatgt 180
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<210> 1802

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

[illegible]

<210> 1803

<212> DNA

<400> 1803

<210> 1804

<212> DNA

<400> 1804

<210> 1805

<212> DNA

<213> Ctenocephalides felis

<400> 1805

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tcacatgctc attcacaatg gtgagcgccc ccttgagtgc aatgtatgca agaagacatt 120
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<210> 1806

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1806

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tctcctgtca gcatgtctac acgatggtac cctctttatc aaagaggcaa tccacagctg 180
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aaacgagatt tgaaaggata tattgtaaaa gaagaagata cttaaattagc ttatgttaca 420
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cgncaccan 549
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<210> 1807

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1807

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acaacgagat ccagnatgta aaccttaacc tgcttcgnga ncttggttt ctcatatttt 540
ttgnaaaag 549
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ataaagacaa ggataaaatg aaacagacta aattagattt tagtaaaaag ggaaagaaga 300
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 tgaacctct 549

<210> 1811

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1811

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 cagtacaac 549

<210> 1812

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1812

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<210> 1813

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1813

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gtccactttg tgagattgag catggaaaat ataatgaaca atnccggttat cgggtcgtaa 420
tgtgcangaa caggcttaag ggtcatgoga cccagactct gaagaaangt acctgatgcn 480
totccatgca ggcgggttgc attngctnca catgcgctng cggaccgtna tacttgacaa 540
ctttgccga 549
```

<210> 1814

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1814

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<210> 1815

<211> 549

<212> DNA

<213> *Ctenocephalides felis*

<400> 1815

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ttggtcgtg 549
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<210> 1816
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1816
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 aaagaagtgt atgcctatgc cgatgaatgg aattcaggtc gtgtagaaga agttaaaagt 480
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 ggatgcaaaa 549

<210> 1817
 <211> 87
 <212> DNA
 <213> Ctenocephalides felis

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 ccagtttagc tactgggttg cgctgat 87

<210> 1818
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1818
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 tacaccgtca actttgtgc cgacgaaaac ggttttcgac cagaaggagc acacattccg 360
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 gaatatgtca tgtatgcaa tatattaact gaattgataa cttaatagat caaaagcaat 480
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<210> 1819
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1819
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 cagctgatg 549

<210> 1820
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1820
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 aatcgctgcc gtaaccgcca ctccctacgg tgccggagga cacggaagca gtggcggcgg 180
 acacggctcc gggcttgact ccggttttgg ggggcacgga agccgcggca gtggacttgg 240
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 tggaggccta ggcgatctg gaggttttgg aggccaagga ggccttgggt gtggacacgg 360
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 tcattctaga tgaaatataa aagagaactc tctgaaaatt tgttggaatc tgtgattccg 480
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 ataatttga 549

<210> 1821
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1821
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 aattgcatga tatcaactgg attgtagcca actgcacaac acctgctaatt tattttcata 180
 ttttacgtag acaaattgct ttaccttcc gtaagccatt gatcattatg actccaaaat 240
 cggtgttgag acatccagaa gctaagagtt cttttgatca aatgacagag aacactgaat 300
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gtcgaactac acgttttggc gacagatttt tcgtacattg tcaataatta atattttaac 60
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 ttcgaggggg gctcatttaa actagaatta tttttaccgg aagactaccg catgtctgcg 360
 cccaagggtca gatttatcac gaaaatatat catccaaata ttgacagact aggtcgtatc 420
 tgtttggaaca tactgaaaga taaatggagc cccgctctta aatcagaacg gtactottat 480
 caatacaagc cttactgagc gccctaattc agatgatcct ttggcaatga tgtggtgatg 540
 tggaagtaa 549

<210> 1825

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1825

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 tcattcgact ggtacttatt tgtaactcag ttatatTTTT tcgcccgggtg attcagaaga 180
 atgcaaaaaa cggctaccac tccatcaaaa atacttgatc tcaactgcgc gccattttta 240
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 aaattactga ttctgctatg ttgcttattt ggagtgtggt ctgccgcttt ttgcgtggaa 480
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<210> 1826

<211> 541

<212> DNA

<213> Ctenocephalides felis

<400> 1826

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 gaacagatga tttaaaaactg ggcaactctag taggagaaga caatacggg aataaatatt 180
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 tcaggcatgg aatcccaatg caaaataagt catgaaaatt ttggatttac ttagtctaatt 480
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<210> 1827
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1827
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 atatatttat atttatcaaa tgcatagtat ggaaaagtct ctagatactt tgggtctagta 360
 cctggattat agcgaataa gccaaatttt caattatata aacagaaaat tatttaggct 420
 caaattgcac attggcattg aatttgccga aattgatttt ctagcttcgt ataattgtat 480
 tagaagcatt gatttttttt tggaatacaa aaaggcgtca agtgaaggaa aaattgattt 540
 ggagatata 549

<210> 1828
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1828
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 gaatcatggg gcaagattcg ggagtaaagg attttccttc tttgcctgaa gacaaaatag 180
 atatgattgc tgctaccagc ttattacaac aacatgctgc ggatatccgt cagcaaaaaa 240
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 gtgcttatga ctctactgat tctaagggcc gcataaggct tctcacagat cgcactcaag 360
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 ttttaatttt gattgatgac atgctgcagg aggatagatc cgtgtcgata ttttccatga 480
 gtatgctgta aaaccaagaa agtgatgggc ccttcatgaa ttattgatcg cagacagttc 540
 attgtacat 549

<210> 1829
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1829
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 cgtcgggtct gtggtcagct tcccgaggc ttcagcgacc ttgtccacct ccacgcggga 180
 tgcagaggag aaacgcgcca cactctggct gatggacgca atctgagcct caccgcttac 240
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<210> 1835
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1835
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 ttctttaaac ttgagcgaaa atgacgtgc tgtgttaaat agtatattta atccgtctca 120
 accattagga gaaaatgcat tcgaggaaga tattccagaa ttattagaag atcaagaaga 180
 cccggaaaca ccatttttga acgacgcacg agccttgga gctgaagctg tccgtttggc 240
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 cggctgtcct tcaggttaca acaatcgcg cacaagttcac aggctggcgg gacgagacca 360
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 tntgnttat 549

<210> 1836
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1836
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 gtctcaaggg gatattccaaa ttgaaggttt caacctatct gctgaagagg ctgatgaagg 240
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 ttttgccttc tcagataaaa aatcatacac tctttattta aaagattata tgaaaaaatt 360
 ggtggcgaaa ttagaggaga aatcaccaga acaagttgag gtattcaaaa caaatatgaa 420
 caaagtcag aaagaaattt aagccgttta aagaaatgca aatgttcaat ggtgaatcaa 480
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 ttctgtgtc 549

<210> 1837
 <211> 549
 <212> DNA
 <213> Ctenocephalides felis

<400> 1837
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 cagtgaagtga tttttgtgaa ttactcgaaa cacatacata tataaactca gaataatggg 180
 aactcgagat gacgaatacg attatttggt caaagtgggt ctaataggag actcgggtgt 240
 aggaaaaagt aatttgcttt ctgccttcac tagaaatgaa tttaatcttg agagtaaatac 300
 cacaattgga gttgagtttg caacgaggag tatacaggtt gatggtaaaa caattaaggc 360

gcaaatatgg gatactgctg gccaaagaaag gtatagagct ataacatccg ctattataga 420
ggagctgtgg tgctctotta gtttatgaca ttgcaaagca cccaacttat gaaaatgtag 480
aacgtggtno gagagctaag agatcatctg acagaattag tgtatgctgt gggaaacaaa 540
ttgtctgaa 549

<210> 1838

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1838

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ctcacagga 549

<210> 1839

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1839

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gccccaaaga ggaggattcc aacctcaggc tccaggaaac caaataccaa ttttacggt 180
ttcattcgaa cctaattccag atggttccca caattacaac tatgaaactg gaaatgga 240
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aaggcggcgc ccggcggtag attttctagg aaggaaaaca tctagnccca ccacaacatt 480
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<210> 1840

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1840

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 gttgccatat atataagcgc gaggaagat ttacatacaa gatgggttgc ggaatatcgt 240
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 acaagatct 549

<210> 1841

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1841

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 ggtcgttgcg accaaagtgt tccatcgcgt tgggtgattta ccggaaggat tatcccgctc 180
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<210> 1842

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1842

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 atgttaaccg ggccaggcat tccgcaaagg tcgcgatgct gacatagacc cagttatccg 480
 ctgcaaagag gcnaatncca gcaaaagcca atagcggcag atggagtgcg ggcggtaaa 540
 gcaacgctg 549

Cognitive Function		Psychiatric Function		Physical Function		Quality of Life	
Measure	Score	Measure	Score	Measure	Score	Measure	Score
MMSE	24	BDI	10	6MWT	450	QoL	75
MoCA	26	PHQ-9	5	10MWT	500	QoL	80
Trail Making Test	15	Stress	10	20MWT	550	QoL	85
Digit Span	12	Depression	10	30MWT	600	QoL	90
Block Design	18	Anxiety	10	40MWT	650	QoL	95
Verbal Fluency	15	Life Satisfaction	10	50MWT	700	QoL	100
Symbol Digit	12	Health-Related QoL	10	60MWT	750	QoL	105
Stroop Test	15	Physical Function	10	70MWT	800	QoL	110
Digit Span	12	Emotional Function	10	80MWT	850	QoL	115
Block Design	18	Social Function	10	90MWT	900	QoL	120
Verbal Fluency	15	Role Function	10	100MWT	950	QoL	125
Symbol Digit	12	Energy/Fatigue	10	110MWT	1000	QoL	130
Stroop Test	15	Physical Function	10	120MWT	1050	QoL	135
Digit Span	12	Emotional Function	10	130MWT	1100	QoL	140
Block Design	18	Social Function	10	140MWT	1150	QoL	145
Verbal Fluency	15	Role Function	10	150MWT	1200	QoL	150
Symbol Digit	12	Energy/Fatigue	10	160MWT	1250	QoL	155
Stroop Test	15	Physical Function	10	170MWT	1300	QoL	160
Digit Span	12	Emotional Function	10	180MWT	1350	QoL	165
Block Design	18	Social Function	10	190MWT	1400	QoL	170
Verbal Fluency	15	Role Function	10	200MWT	1450	QoL	175
Symbol Digit	12	Energy/Fatigue	10	210MWT	1500	QoL	180
Stroop Test	15	Physical Function	10	220MWT	1550	QoL	185
Digit Span	12	Emotional Function	10	230MWT	1600	QoL	190
Block Design	18	Social Function	10	240MWT	1650	QoL	195
Verbal Fluency	15	Role Function	10	250MWT	1700	QoL	200
Symbol Digit	12	Energy/Fatigue	10	260MWT	1750	QoL	205
Stroop Test	15	Physical Function	10	270MWT	1800	QoL	210
Digit Span	12	Emotional Function	10	280MWT	1850	QoL	215
Block Design	18	Social Function	10	290MWT	1900	QoL	220
Verbal Fluency	15	Role Function	10	300MWT	1950	QoL	225
Symbol Digit	12	Energy/Fatigue	10	310MWT	2000	QoL	230
Stroop Test	15	Physical Function	10	320MWT	2050	QoL	235
Digit Span	12	Emotional Function	10	330MWT	2100	QoL	240
Block Design	18	Social Function	10	340MWT	2150	QoL	245
Verbal Fluency	15	Role Function	10	350MWT	2200	QoL	250
Symbol Digit	12	Energy/Fatigue	10	360MWT	2250	QoL	255
Stroop Test	15	Physical Function	10	370MWT	2300	QoL	260
Digit Span	12	Emotional Function	10	380MWT	2350	QoL	265
Block Design	18	Social Function	10	390MWT	2400	QoL	270
Verbal Fluency	15	Role Function	10	400MWT	2450	QoL	275
Symbol Digit	12	Energy/Fatigue	10	410MWT	2500	QoL	280
Stroop Test	15	Physical Function	10	420MWT	2550	QoL	285
Digit Span	12	Emotional Function	10	430MWT	2600	QoL	290
Block Design	18	Social Function	10	440MWT	2650	QoL	295
Verbal Fluency	15	Role Function	10	450MWT	2700	QoL	300
Symbol Digit	12	Energy/Fatigue	10	460MWT	2750	QoL	305
Stroop Test	15	Physical Function	10	470MWT	2800	QoL	310
Digit Span	12	Emotional Function	10	480MWT	2850	QoL	315
Block Design	18	Social Function	10	490MWT	2900	QoL	320
Verbal Fluency	15	Role					

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<210> 1844
<211> 549
<212> DNA
<213> Ctenocephalides felis
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<210> 1845
<211> 549
<212> DNA
<213> Ctenocephalides felis
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678

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 ggcgctgtat tcaattctga cgctgggtggc aggcagcacg gtgatttgtc gattaatcgg 480
 tgaatgaagg naacggcgaa tagttgcctt tatttcacta agtttggacg ttgcacatta 540
 tgcattgatg 549

<210> 1846

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1846

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 tccagatcca aatcacccgaa ttggaattgt ctttggacgt tgccaataag actaacatcg 180
 atttgcagaa gaccatcaag aagcaatctt tgcagttgac cgagatccag gccgcctacg 240
 atgatgtcca acgccaattg caagtgcctt tggaccaatt gtccgtctcc cagagacgcg 300
 tccaatcttt gactgctgaa gtcgaggaag tgcgcagcaa ctacgaatct ttgtcgcgcg 360
 ccaaacgcca agtcgaacag cagtacgagg agagcgctcg cgcatcaacg agttgacggg 420
 aatcaacgtc aatttggcaa gctcaagagc aagatcgagc aggaattgtc gctttgagcg 480
 gagactcgag caagtcccca ggaattgaga gtcagcgacg agagatccan ggcgcagtcg 540
 actgaatca 549

<210> 1847

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1847

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 ctgcggtgat gtatccgaaa agaaacaaga gaaacgcgga ctggccggnc tcggcacgca 120
 cggaggcggg gccttactgt natccgntgg aggacacggn ggnctcggg gaggatacgg 180
 tggcggatat ggaggtggtt ntggagggcg tctcggcggt ggactcggcg gtggatttgg 240
 cggcggagcn nnattcggcg gaggtgctgg attnggcgga ggattnggag gcggcngctg 300
 gangtggnng cgggtggcggg ggtggcggng ctggtcttgg tgggtccagtc acccttggca 360
 cacgcagtna cgaactacta ctgtgacaca nggtattcca tacgccgtcc acaaccttac 420
 ccantgactg tnacacgcac cgttggagta ccancntca accnntncn ttgtntctcc 480
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 ccnctgcnc 549

<210> 1848

<211> 508

<212> DNA

<213> Ctenocephalides felis

<400> 1848

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gattcaaggt ggtgacttca ccaggggaga tggaactgga ggccgctcaa tttatggaga 120
acgttttgct gatgaaaact tcaagttgaa gcattatggt gctggatggt tgtccatggc 180
aaatgctggc aaagacacta acggatctca attctttatc actacaaaag ccactggctg 240
gttagatgga cgtcatgttg tattcggaaa agtgattaag ggaatggatg tggtagaggaa 300
aattgaatca acatcaacag attccagaga caaaccacaa cgtgatgttg aaattgtaga 360
ctctggtgct gaagctgttt ctgaacccta cgggtgtggc aaagaagatg caactaatta 420
aatgatttat taattttgat aatttttaac cacttcaaga caaattgttc tgataaataa 480
aacatttttt aaaaaaaaaa aaaaaaaaaa 508

<210> 1849

<211> 549

<212> DNA

<213> Ctenocephalides felis

<400> 1849

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tttgcttcgg tagtgaaaaa ctatccgaag tcaccaaagg ctgcagatgc gatgtttaaa 120
gtcggcgtca tcatgcagga caaagggtgac aatgcggctg gctaagtcgc gtttttcgtg 180
ttcatacaca tacgacagca ccgcgaaacc ttgcgtgccg tgctgctggg tggcctcttg 240
cgccagggcg ctacgcagaa tgtcgcggat agcttcggaa cggttgttat aaccacgacg 300
ctggctcagg ctgtccagcg tctccagtaa atcgtcatca agcgtgatgg tgactcgttg 360
catttgcggt aaaccttttc tgtggtgcga cggcgcacgg ngaatgcggg taataccgcg 420
ttttgtagca cagtcgcggc gtcagaggaa aaggtttaatt tctctccacc actgggtttt 480
gacgattgtc gtgtcataac attacccgtg gaaaagcgtt ctacagcgta gtcgtggtga 540
tgacagnan 549

<210> 1850

<211> 348

<212> DNA

<213> Ctenocephalides felis

<400> 1850

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caattataat gatgaagaat aaaaaaaaaa tcatcttgtc aaagataact taaaaaataa 120
ttaaatataa atagatttat ctaaaagcag ttcgtcttat gagaatttat attgaaatgc 180
tatgttaact tgtatggcgg tgttgtatatt tacaaaataa aacttcttac ctaaagtgg 240
gttggtagaa gtgtttccaa aaccaaagt gctagtgtgct ggtttggtta atgtattatt 300
aaataaagag tttgaagtag ttgtttgacc aaatcctcca aaaccagt 348

<210> 1851

<211> 436

<212> DNA

<213> Ctenocephalides felis

<210> 1855
 <211> 332
 <212> DNA
 <213> Ctenocephalides felis

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 tcatgtagtt agcacaagtt cttggacaag aagtgccaca ggaagtaaatt tcttcatttt 120
 ctgggcaagt tgtgttcaca gcaggcaaag gatcaacaag gtcttctgga agaatttcac 180
 ctggaagagt ttcttctgga agcgtttcat cacagtagac aaaagcagcc aacacaaggc 240
 aactcaatac agtaactaat ataactttca ttttgtaaca aacttttctt cactctaaaa 300
 tagatctaaa aattcaaatac gatcgatcgc ag 332

<210> 1856
 <211> 341
 <212> DNA
 <213> Ctenocephalides felis

<400> 1856
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 cttgggtggcg ttggcagcac aaatatattc acccaagaaa agctggaatt gcaggattct 120
 atcaattgac tgttggatca atgattttgt tctatgcttt gaactacggc aagatctctg 180
 ctcataagaa ctacaaatac cactaaaacc aaacatctta cgatggtagt gtgtctgttg 240
 atggcagaat aaattttctaa atgtaaaatc tgtatcaata tacaattcaa tatattaaat 300
 tacacgagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 341

<210> 1857
 <211> 238
 <212> DNA
 <213> Ctenocephalides felis

<400> 1857
 ttctcatcca atcaaatttt tctaattctt ccataataat cggaagaacg agcattcccg 60
 gtgcgcccat tactattctt gataaaacaa cttgactgat tccctttgca gcagctaacc 120
 gtgactttcc tataatgcgg cttcactat ctacaacgct tattcctgct aataattctg 180
 tttgacgcat catcggaata ttaacgcaat tagcagctgc tactgcggca aaaggaac 238

<210> 1858
 <211> 263
 <212> DNA
 <213> Ctenocephalides felis

<400> 1858
 ccaaaatttta ttgtgatatn ngtaacacaan ntgtganann ttttgtggaa ncanaanang 60
 tantggtntt gcngttaant attataagga tactaatagt gatgttgtaa gagttaggac 120

taatagatga gtctttcttca attttgataa acatattttt ataatctgtg ttaaattttg 180
 cacttgtaat gctgtgcttt ttaatgaata aacatgcaat attaaacttc gaaaaaaaaa 240
 aaaaaagtta attncttgct tgt 263

<210> 1859

<211> 613

<212> DNA

<213> Ctenocephalides felis

<400> 1859

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 attaagaaga aataaatgaa atattttataa ttattaaaga atcttgtatc gtgcaaaaaca 120
 taaatgatat ataaattaat ttogatctct taataaaagt attatttcaa ttaccttatt 180
 tgatgagaaa atgcacaaca aaatcctggg cctgggtgtt taccatgtcg tcttgatgtt 240
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 actggagttg cccaaatcga tgaacaatga tgaaaagttg ttcctgacaa ctggtcaa 360
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 agtaaacgta acagccgaca aagtagccct aaaagaaatc acacctgacc atcaccatcc 480
 agtagtgact tctacacaaa aaacaatttt aaacgcatcc acgaccgttg aaaaaaatcc 540
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 agacaaccac ctc 613

<210> 1860

<211> 613

<212> DNA

<213> Ctenocephalides felis

<400> 1860

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 agaagtcact actggatggg gatggtcagg tgtgatttct tttagggcta ctttgtcggc 180
 tgttacgttt actgtatttt ctgttatatt gaaatctgcc aattcgtcac tatatacagt 240
 agtcccttcc aaaatttgac cagttgtcag gaacaacttt tcatcattgt tcatcgattt 300
 gggcaactcc agtaagacgt ctgtagaatt atcattgggtg tcttcatgtg tagtcttggc 360
 gactaccatg gtaaacaatca ggaogacatg gtaaacaacc aggaccagga ttttggtgtg 420
 cattttctca tcaaataagg taattgaaat aatactttta ttaagagatc gaaattaatt 480
 tatatatcat ttatgttttg cagcatataa gattctttta taattataaa tatttcat 540
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<210> 1861

<211> 2739

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (191)..(2206)

<400> 1861

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taaatgatat ataaattaat ttcgatctct taataaaagt attatttcaa ttaccttatt 180

tgatgagaaa atg cac aac aaa atc ctg gtc ctg gtt gtt tac cat gtc 229

Met His Asn Lys Ile Leu Val Leu Val Val Tyr His Val

1

5

10

gtc ctg atg ttt acc atg gta gtc gcc aag act aca cat gaa gac acc 277

Val Leu Met Phe Thr Met Val Val Ala Lys Thr Thr His Glu Asp Thr

15

20

25

aat gat aat tct aca gac gtc tta ctg gag ttg ccc aaa tcg atg aac 325

Asn Asp Asn Ser Thr Asp Val Leu Leu Glu Leu Pro Lys Ser Met Asn

30

35

40

45

aat gat gaa aag ttg ttc ctg aca act ggt caa att ttg gaa ggg act 373

Asn Asp Glu Lys Leu Phe Leu Thr Thr Gly Gln Ile Leu Glu Gly Thr

50

55

60

act gta tat agt gac gaa ttg gca gat ttc aat ata aca gaa aat aca 421

Thr Val Tyr Ser Asp Glu Leu Ala Asp Phe Asn Ile Thr Glu Asn Thr

65

70

75

gta aac gta aca gcc gac aaa gta gcc cta aaa gaa atc aca cct gac 469

Val Asn Val Thr Ala Asp Lys Val Ala Leu Lys Glu Ile Thr Pro Asp

80

85

90

cat cac cat cca gta gtg act tct aca caa aaa aca att tta aac gca 517

His His His Pro Val Val Thr Ser Thr Gln Lys Thr Ile Leu Asn Ala

95

100

105

tcc acg acc gtt gaa aaa aat cct gga cat caa acc agt att tca gaa 565

Ser Thr Thr Val Glu Lys Asn Pro Gly His Gln Thr Ser Ile Ser Glu

110

115

120

125

gaa tct acc aca aaa ttg gta aaa aca acc act gaa gac aac cac ctc 613

Glu Ser Thr Thr Lys Leu Val Lys Thr Thr Glu Asp Asn His Leu

130

135

140

ggg gta aag agc ctg aat gaa cct ggt gat gaa caa gaa tta aaa aaa 661

Gly Val Lys Ser Leu Asn Glu Pro Gly Asp Glu Gln Glu Leu Lys Lys	
145	150 155
cca tca tca cat ggt aag gag cat att tct tta cca gtg gct tca cca	709
Pro Ser Ser His Gly Lys Glu His Ile Ser Leu Pro Val Ala Ser Pro	
160	165 170
gta cca cca gta tcg cat atc ttc cag gct aca cca gga gac ctt tgt	757
Val Pro Pro Val Ser His Ile Phe Gln Ala Thr Pro Gly Asp Leu Cys	
175	180 185
cca gcc ttc gac gat gca gat cgc ttc acc cag aca gaa ctt ttg tcc	805
Pro Ala Phe Asp Asp Ala Asp Arg Phe Thr Gln Thr Glu Leu Leu Ser	
190	195 200 205
agg ctg aca aac gat tgc agg tac gat aag ctg gag cgc cct ttg ggg	853
Arg Leu Thr Asn Asp Cys Arg Tyr Asp Lys Leu Glu Arg Pro Leu Gly	
210	215 220
cct cac aat ggt gca ggg ccg ctc ccg gtg gcc gcc aga att tac gtg	901
Pro His Asn Gly Ala Gly Pro Leu Pro Val Ala Ala Arg Ile Tyr Val	
225	230 235
tat ttt ata caa aat acg gac gcg cac gaa ttg tca ttt tcc gtg acc	949
Tyr Phe Ile Gln Asn Thr Asp Ala His Glu Leu Ser Phe Ser Val Thr	
240	245 250
gtc ctc ctc caa ttt cgt tac cag gac gcc aga ttg gcc tac aaa aaa	997
Val Leu Leu Gln Phe Arg Tyr Gln Asp Ala Arg Leu Ala Tyr Lys Lys	
255	260 265
gtg gca ccc acc agg acg gtc atc atg ggc gaa tcg cag ctc agg gac	1045
Val Ala Pro Thr Arg Thr Val Ile Met Gly Glu Ser Gln Leu Arg Asp	
270	275 280 285
aaa atc tgg gta cca cat gta ttc gtt gcc aac gag aga tct tcc cag	1093
Lys Ile Trp Val Pro His Val Phe Val Ala Asn Glu Arg Ser Ser Gln	
290	295 300
gtt atg ggc aca gat gcc caa tct aag gac atg ttg gtg tca gta gct	1141
Val Met Gly Thr Asp Ala Gln Ser Lys Asp Met Leu Val Ser Val Ala	
305	310 315
cct gat ggt aca gtc gtc ttt tcg gtc agg atg aag gca act ttg tac	1189
Pro Asp Gly Thr Val Val Phe Ser Val Arg Met Lys Ala Thr Leu Tyr	
320	325 330
tgt tgg atg aat tta agg aaa ttt cct ttt gat gaa caa cag tgt cag	1237

Cys Trp Met Asn Leu Arg Lys Phe Pro Phe Asp Glu Gln Gln Cys Gln	
335	340 345
atg atg ttg gaa agt tgg aag tac aat aca agt gaa ctc cta ttg act	1285
Met Met Leu Glu Ser Trp Lys Tyr Asn Thr Ser Glu Leu Leu Leu Thr	
350	355 360 365
tgg gaa cca act gca cca gta act tta gca cca gaa cta cat ttg acc	1333
Trp Glu Pro Thr Ala Pro Val Thr Leu Ala Pro Glu Leu His Leu Thr	
	370 375 380
gaa tat gtc ctt act gac atg tgg gta aat gaa aca gtt gtc aag gct	1381
Glu Tyr Val Leu Thr Asp Met Trp Val Asn Glu Thr Val Val Lys Ala	
	385 390 395
gat ttg gat gac ctg aga cac gga gca ttt ggt ggg aca tac agt gcc	1429
Asp Leu Asp Asp Leu Arg His Gly Ala Phe Gly Gly Thr Tyr Ser Ala	
	400 405 410
tta agt ttc acg att caa ata agt cgt gaa atg ggt tac tat tta atg	1477
Leu Ser Phe Thr Ile Gln Ile Ser Arg Glu Met Gly Tyr Tyr Leu Met	
	415 420 425
gat tac ttt ttg cca tca gta atg atc gtg tgg tgt tcc tgg gta agt	1525
Asp Tyr Phe Leu Pro Ser Val Met Ile Val Ser Cys Ser Trp Val Ser	
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ttt tgg ctg gca gca gac caa tca gca ccc aga gtc acc tta ggt aca	1573
Phe Trp Leu Ala Ala Asp Gln Ser Ala Pro Arg Val Thr Leu Gly Thr	
	450 455 460
agc acc atg tta tca ttt atc act tta gca agt gcc caa gga aaa act	1621
Ser Thr Met Leu Ser Phe Ile Thr Leu Ala Ser Ala Gln Gly Lys Thr	
	465 470 475
tta ccc aaa gta tgg tac atc aaa gct tca gaa atc tgg ttt tta ggt	1669
Leu Pro Lys Val Ser Tyr Ile Lys Ala Ser Glu Ile Trp Phe Leu Gly	
	480 485 490
tgc acc ggg ttt att ttt ggg agt tta gtg gaa ttc gcg ttt gtc aac	1717
Cys Thr Gly Phe Ile Phe Gly Ser Leu Val Glu Phe Ala Phe Val Asn	
	495 500 505
aca att tgg aga cga agg aaa aat gtg gaa ttg aaa aaa gtc aac agc	1765
Thr Ile Trp Arg Arg Arg Lys Asn Val Glu Leu Lys Lys Val Asn Ser	
	510 515 520 525
aag tat att ttg aag tca act ttg acg ccg agg ttg gcc cgg aag gag	1813

Lys Tyr Ile Leu Lys Ser Thr Leu Thr Pro Arg Leu Ala Arg Lys Glu
530 535 540

ttt cat gct tcg ttt aat tcg aat cct gga ggt ggt aat aag gat gat 1861
Phe His Ala Ser Phe Asn Ser Asn Pro Gly Gly Gly Asn Lys Asp Asp
545 550 555

cag gat ttg gga aga ggg att agg gtc ttt ccg ccg cct ttg gtc aag 1909
Gln Asp Leu Gly Arg Gly Ile Arg Val Phe Pro Pro Pro Leu Val Lys
560 565 570

gct agg tct tgt tcc agt ctg gat agg agt aat gga tcc ggg aat ttt 1957
Ala Arg Ser Cys Ser Ser Leu Asp Arg Ser Asn Gly Ser Gly Asn Phe
575 580 585

ttg agc gtc cat gga aat gat cac aaa gtt cca aca ata aca gca caa 2005
Leu Ser Val His Gly Asn Asp His Lys Val Pro Thr Ile Thr Ala Gln
590 595 600 605

tgt gca gac gat gcc gca agt gac cag att tca gtt tgt gtc gat ggg 2053
Cys Ala Asp Asp Ala Ala Ser Asp Gln Ile Ser Val Cys Val Asp Gly
610 615 620

gaa aac gaa gaa cct gca caa att gtt cac cac acc tgg acg acg atg 2101
Glu Asn Glu Glu Pro Ala Gln Ile Val His His Thr Trp Thr Thr Met
625 630 635

aca cct caa gaa att tcc atg tgg att gac aaa agg tcc aga att tgt 2149
Thr Pro Gln Glu Ile Ser Met Trp Ile Asp Lys Arg Ser Arg Ile Cys
640 645 650

ttc ccg ata gct ttt gct ata ttt aac ttt ttt tat tgg ata ttt gtt 2197
Phe Pro Ile Ala Phe Ala Ile Phe Asn Phe Phe Tyr Trp Ile Phe Val
655 660 665

tat tat tta taaacacact taatatactt atagtttttaa taattaataa 2246
Tyr Tyr Leu
670

atttataaaa taattaataaaa taaatatatg taaaatttaa aggaaacgtg aatagaatca 2306

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gcgactcagt atactcgaaa atcgctattg aaatatctta cacaatttag tcattcctat 2546

ttcacatata atagttaata attaaaattg aaatttttaa ttaaaaaata atgatactgg 2606
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aaaaaaaaaa aaa 2739

<210> 1862
<211> 672
<212> PRT
<213> Ctenocephalides felis

<400> 1862
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20 25 30
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35 40 45
Lys Leu Phe Leu Thr Thr Gly Gln Ile Leu Glu Gly Thr Thr Val Tyr
50 55 60
Ser Asp Glu Leu Ala Asp Phe Asn Ile Thr Glu Asn Thr Val Asn Val
65 70 75 80
Thr Ala Asp Lys Val Ala Leu Lys Glu Ile Thr Pro Asp His His His
85 90 95
Pro Val Val Thr Ser Thr Gln Lys Thr Ile Leu Asn Ala Ser Thr Thr
100 105 110
Val Glu Lys Asn Pro Gly His Gln Thr Ser Ile Ser Glu Glu Ser Thr
115 120 125
Thr Lys Leu Val Lys Thr Thr Thr Glu Asp Asn His Leu Gly Val Lys
130 135 140
Ser Leu Asn Glu Pro Gly Asp Glu Gln Glu Leu Lys Lys Pro Ser Ser
145 150 155 160
His Gly Lys Glu His Ile Ser Leu Pro Val Ala Ser Pro Val Pro Pro
165 170 175

Val Ser His Ile Phe Gln Ala Thr Pro Gly Asp Leu Cys Pro Ala Phe
180 185 190

Asp Asp Ala Asp Arg Phe Thr Gln Thr Glu Leu Leu Ser Arg Leu Thr
195 200 205

Asn Asp Cys Arg Tyr Asp Lys Leu Glu Arg Pro Leu Gly Pro His Asn
210 215 220

Gly Ala Gly Pro Leu Pro Val Ala Ala Arg Ile Tyr Val Tyr Phe Ile
225 230 235 240

Gln Asn Thr Asp Ala His Glu Leu Ser Phe Ser Val Thr Val Leu Leu
245 250 255

Gln Phe Arg Tyr Gln Asp Ala Arg Leu Ala Tyr Lys Lys Val Ala Pro
260 265 270

Thr Arg Thr Val Ile Met Gly Glu Ser Gln Leu Arg Asp Lys Ile Trp
275 280 285

Val Pro His Val Phe Val Ala Asn Glu Arg Ser Ser Gln Val Met Gly
290 295 300

Thr Asp Ala Gln Ser Lys Asp Met Leu Val Ser Val Ala Pro Asp Gly
305 310 315 320

Thr Val Val Phe Ser Val Arg Met Lys Ala Thr Leu Tyr Cys Trp Met
325 330 335

Asn Leu Arg Lys Phe Pro Phe Asp Glu Gln Gln Cys Gln Met Met Leu
340 345 350

Glu Ser Trp Lys Tyr Asn Thr Ser Glu Leu Leu Leu Thr Trp Glu Pro
355 360 365

Thr Ala Pro Val Thr Leu Ala Pro Glu Leu His Leu Thr Glu Tyr Val
370 375 380

Leu Thr Asp Met Trp Val Asn Glu Thr Val Val Lys Ala Asp Leu Asp
385 390 395 400

Asp Leu Arg His Gly Ala Phe Gly Gly Thr Tyr Ser Ala Leu Ser Phe
405 410 415

Thr Ile Gln Ile Ser Arg Glu Met Gly Tyr Tyr Leu Met Asp Tyr Phe
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<210> 1863
 <211> 2739
 <212> DNA
 <213> Ctenocephalides felis

<400> 1863

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 <213> Ctenocephalides felis

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 Phe Thr Met Val Val Ala Lys Thr Thr His Glu Asp Thr Asn Asp Asn
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 Ser Thr Asp Val Leu Leu Glu Leu Pro Lys Ser Met Asn Asn Asp Glu
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 Lys Leu Phe Leu Thr Thr Gly Gln Ile Leu Glu Gly Thr Thr Val Tyr
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 Thr Ala Asp Lys Val Ala Leu Lys Glu Ile Thr Pro Asp His His His
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 cca gta gtg act tct aca caa aaa aca att tta aac gca tcc acg acc 336
 Pro Val Val Thr Ser Thr Gln Lys Thr Ile Leu Asn Ala Ser Thr Thr
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Cys Ser Ser Leu Asp Arg Ser Asn Gly Ser Gly Asn Phe Leu Ser Val	
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His Gly Asn Asp His Lys Val Pro Thr Ile Thr Ala Gln Cys Ala Asp	
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Glu Ile Ser Met Trp Ile Asp Lys Arg Ser Arg Ile Cys Phe Pro Ile	
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<210> 1865

<211> 672

<212> PRT

<213> Ctenocephalides felis

<400> 1865

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Thr Ala Asp Lys Val Ala Leu Lys Glu Ile Thr Pro Asp His His His	85	90	95
Pro Val Val Thr Ser Thr Gln Lys Thr Ile Leu Asn Ala Ser Thr Thr	100	105	110
Val Glu Lys Asn Pro Gly His Gln Thr Ser Ile Ser Glu Glu Ser Thr	115	120	125
Thr Lys Leu Val Lys Thr Thr Thr Glu Asp Asn His Leu Gly Val Lys	130	135	140
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His Gly Lys Glu His Ile Ser Leu Pro Val Ala Ser Pro Val Pro Pro	165	170	175
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Val Ser Tyr Ile Lys Ala Ser Glu Ile Trp Phe Leu Gly Cys Thr Gly 485 490 495		
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Gly Arg Gly Ile Arg Val Phe Pro Pro Pro Leu Val Lys Ala Arg Ser		
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Cys Ser Ser Leu Asp Arg Ser Asn Gly Ser Gly Asn Phe Leu Ser Val		
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His Gly Asn Asp His Lys Val Pro Thr Ile Thr Ala Gln Cys Ala Asp		
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Asp Ala Ala Ser Asp Gln Ile Ser Val Cys Val Asp Gly Glu Asn Glu		
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Glu Pro Ala Gln Ile Val His His Thr Trp Thr Thr Met Thr Pro Gln		
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Glu Ile Ser Met Trp Ile Asp Lys Arg Ser Arg Ile Cys Phe Pro Ile		
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<210> 1866

<211> 2016

<212> DNA

<213> Ctenocephalides felis

<400> 1866

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<210> 1868

<211> 608

<212> PRT

<213> Ctenocephalides felis

<400> 1868

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Leu Ser Lys Thr Ser Leu Pro Pro Asp Gln Asn Ala Thr Ile Glu Asn
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Pro Asp Pro Val Leu Pro Glu Lys Gly Ser Ala Glu Gln Glu Gln His
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Ser Ser Met Ser Ile Phe Phe Val Leu Cys Val Leu Ala Leu Gly Ile
85 90 95

Leu Leu Ile His Phe Met Leu Gln Thr Gly Phe Gln Tyr Leu Pro Glu
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Ser Ile Val Val Val Phe Leu Gly Ala Leu Ile Gly Leu Ile Ile Asn
115 120 125

Leu Met Ser Ser Lys Asn Ile Ala Asn Trp Lys Asn Glu Glu Ala Phe
130 135 140

Ser Pro Thr Ala Phe Phe Leu Val Leu Leu Pro Pro Ile Ile Phe Glu
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Ser Gly Tyr Asn Leu His Lys Gly Asn Phe Phe Gln Asn Ile Gly Ser
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Ile Val Leu Thr Thr Ala Val Leu Glu Ser Asn Asn Pro Leu Met Thr		
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Thr Ala Glu Ala Val Val Ser Gly Leu Asn Arg Phe Cys Leu Met Phe		
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Phe Ala Ser Ala Gly Ile Gly Val Val Phe Ala Leu Ile Ser Ala Leu		
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<210> 1871

<211> 1824

<212> DNA

<213> Ctenocephalides felis

<400> 1871

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His Leu Arg Lys Ile Asn Asp His Leu Ala Arg Arg Gly Thr Arg Phe
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165 170 175

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245 250 255

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 <213> Ctenocephalides felis

<400> 1873

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<210> 1874

<211> 2383

<212> DNA

<213> Ctenocephalides felis

<400> 1874

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<211> 457

<212> DNA

<213> Ctenocephalides felis

<400> 1877

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<211> 1291

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<211> 1291

<212> DNA

<213> Ctenocephalides felis

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<210> 1880

<211> 279

<212> DNA

<213> Ctenocephalides felis

<400> 1880

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260 265 270

Ser Glu Thr Thr Thr Thr Ser Ala Thr Thr Pro Thr Glu Ser Ser Thr
275 280 285

Ser Ser Glu Thr Thr Thr Thr Ser Ala Thr Thr Pro Thr Glu Ser Ser
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Thr Ser Gly Glu Thr Thr Thr Thr Ser Ala Thr Thr Pro Thr Glu Pro
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370 375 380

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<211> 1477
<212> DNA
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<213> Ctenocephalides felis

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 atattatctc ctttattata tgggtgtgat gagagtgaga tatatgatgc agtgcagaga 600

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gtttgcgtaa gagatgaaac caccacgacg cctgccacaa cgccaaccga atcttccacg 660
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<210> 1886

<211> 1359

<212> DNA

<213> Ctenocephalides felis

<400> 1886

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acaatcgtgt ggatcttgca tcagcggacc ttgttgtttg catgggtattt ctgcggttgg 360
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ggaagattcg gttggtgttg tggcagacgt cgtggttgtt tcaactagac tggaagattc 660
ggttgatgtt gtggcagacg tcgtggttgt ttactagac gtggaagatt cggttggcgt 720
tgtggcaggg gtcgtggttg ttcatctctc tacgcaaaact ctctgcactg catcatatat 780
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<210> 1887

<211> 406

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (20)..(262)

<400> 1887

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                1                5                10

gtg atc atg ata agt gcc gaa tat gct gac gta gat gtg tgc caa gat 100
Val Ile Met Ile Ser Ala Glu Tyr Ala Asp Val Asp Val Cys Gln Asp
          15                20                25

ttg gac gat gga act ttt ctt gct gat tca aac aat tgc caa aat ttc 148
Leu Asp Asp Gly Thr Phe Leu Ala Asp Ser Asn Asn Cys Gln Asn Phe
          30                35                40

ttc att tgt gat gga ggc cga gct tgg aaa atg tat tgt cca gga tca 196
Phe Ile Cys Asp Gly Gly Arg Ala Trp Lys Met Tyr Cys Pro Gly Ser
          45                50                55

ctt tta tgg aat gat cac gaa gga aca tgt gat tac gca caa aat gta 244
Leu Leu Trp Asn Asp His Glu Gly Thr Cys Asp Tyr Ala Gln Asn Val
          60                65                70                75

gaa tgt tac caa cca gaa taaaacattt taatatctga cagcgatttt 292
Glu Cys Tyr Gln Pro Glu
                80

ctgaaactat atttcatact actgttataa taaatttatc ttcattgctc toctcctata 352

aatttattcc gttttaataa aatcaatata aagacaaaaa aaaaaaaaaa aaaa 406
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<210> 1888

<211> 81

<212> PRT

<213> Ctenocephalides felis

<400> 1888

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Met Lys Gly Thr Leu Leu Ile Leu Ser Cys Leu Val Ile Met Ile Ser
  1                5                10                15

Ala Glu Tyr Ala Asp Val Asp Val Cys Gln Asp Leu Asp Asp Gly Thr
          20                25                30
```

Phe Leu Ala Asp Ser Asn Asn Cys Gln Asn Phe Phe Ile Cys Asp Gly
 35 40 45

Gly Arg Ala Trp Lys Met Tyr Cys Pro Gly Ser Leu Leu Trp Asn Asp
 50 55 60

His Glu Gly Thr Cys Asp Tyr Ala Gln Asn Val Glu Cys Tyr Gln Pro
 65 70 75 80

Glu

<210> 1889
 <211> 406
 <212> DNA
 <213> Ctenocephalides felis

<400> 1889
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 aggagagcaa tgaagataaa tttattataa cagtagtatg aaatatagtt tcagaaaatc 120
 gctgtcagat attaaaatgt tttattcttg ttggtaacat tctacatitt gtgcgtaatc 180
 acatgtttcct tcgtgatcat tccataaaaag tgatcctgga caatacattt tccaagctcg 240
 gcctccatca caaatgaaga aattttggca attgtttgaa tcagcaagaa aagttccatc 300
 gtccaaatct tggcacacat ctacgtcagc atattcggca cttatcatga tcacaagaca 360
 tgataatatt aataatgttc ctttcatttt gttattttta attaac 406

<210> 1890
 <211> 243
 <212> DNA
 <213> Ctenocephalides felis

<400> 1890
 atgaaaggaa cattattaat attatcatgt cttgtgatca tgataagtgc cgaatatgct 60
 gacgtagatg tgtgccaaaga tttggacgat ggaacttttc ttgctgattc aaacaattgc 120
 caaaattttct tcatttgtga tggaggccga gcttggaaaa tgtattgtcc aggatcactt 180
 ttatggaatg atcacgaagg aacatgtgat tacgcacaaa atgtagaatg ttaccaacca 240
 gaa 243

<210> 1891
 <211> 243
 <212> DNA
 <213> Ctenocephalides felis

<400> 1891

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ttctggttgg taacattcta ctttttgtgc gtaatcacat gttccttcgt gatcattcca 60
taaaagtgat cctggacaat acattttoca agctcggcct ccatcacaaa tgaagaaatt 120
ttggcaattg tttgaatcag caagaaaagt tccatcgtcc aaatcttggc acacatctac 180
gtcagcatat tcggcactta tcatgatcac aagacatgat aatattaata atgttccttt 240
cat 243
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<210> 1892

<211> 974

<212> DNA

<213> *Ctenocephalides felis*

<400> 1892

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ttaatgtcga cggaacgcct ttaacagtaa ataaagaagt atttgcata ttggatgagc 60
ccgcaccagg agtagtacct actcctgaac ctacacctgt accgaaaccc gagcaaaaat 120
gtaaaaaagt aaaatttagt tgcgtgaatt cgtgcagttc acccgaaatg cagtattgtc 180
cggaatatag agcagatccg gtttaaggaat cctgtagccc agatcaagtg tgcgctgac 240
aaagtggata tctacagtgc accactaaag aaagtacagt ctgcaaagta caaggtttca 300
aatgtccgtc accatcgaga ttttatccaa atataaatga ttgtcaaagc tattattatt 360
gtgacgaaaa tagtatagga acccaatatt attgccccgc aaattttgca tatgatccgt 420
tacgtcataa ttgoggacct atggctctgg gcacaaaatg ctatacagtt acatgtcctg 480
cacagcctaa ggtgcttccg tacattggtg ataaatcatt gtacgtcgta tgtatggccg 540
gaagaggaac cgtattgcaa tgogaagaac ccgccgagtt ttccccaagg agcgaaacct 600
gtgtcgggca atgccgagca cgtggaaaat ttgctttcaa gaacgacgca acatgccgga 660
agttcttcac gtgtttacgt cctaaaggag agccagttcc tgatcaatgt ccgattggaa 720
cagtatttaa ccaagctact caaagotgca acacaggaac ttgcgagagg aaacctaat 780
tatattaata tattgatgaa gtattcaaca aaagaaacta tacaaaatat gtactttgtt 840
ttactttatg tgttatataa aaaaatatta tggttgaaca caggctcgca aatatgataa 900
ggcatttaag aattttacaa tttagatitt tttaaatcca tgaatatatt tgttctaate 960
aaaaaaaaaaaa 974
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<210> 1893

<211> 974

<212> DNA

<213> *Ctenocephalides felis*

<400> 1893

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ccgcaccagg agtagtacct actcctgaac ctacacctgt accgaaaccc gagcaaaaat 120
gtaaaaaagt aaaatttagt tgcgtgaatt cgtgcagttc acccgaaatg cagtattgtc 180
cggaatatag agcagatccg gtttaaggaat cctgtagccc agatcaagtg tgcgctgac 240
aaagtggata tctacagtgc accactaaag aaagtacagt ctgcaaagta caaggtttca 300
aatgtccgtc accatcgaga ttttatccaa atataaatga ttgtcaaagc tattattatt 360
gtgacgaaaa tagtatagga acccaatatt attgccccgc aaattttgca tatgatccgt 420
tacgtcataa ttgoggacct atggctctgg gcacaaaatg ctatacagtt acatgtcctg 480
cacagcctaa ggtgcttccg tacattggtg ataaatcatt gtacgtcgta tgtatggccg 540
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gaagaggaac cgtattgcaa tgcgaagaac cgcgcgagtt ttccccaagg agcgaaacct 600
 gtgtcgggca atgccgagca cgtggaaaat ttgctttcaa gaacgacgca acatgccgga 660
 agttcttcac gtgtttacgt cctaaaggag agccagttcc tgatcaatgt ccgattggaa 720
 cagtatttaa ccaagctact caaagctgca acacaggaac ttgcgagagg aaacctaaat 780
 tatattaata tattgatgaa gtattcaaca aaagaaacta tacaaaatat gtactttgtt 840
 ttactttatg tggtatataa aaaaatatta tgggtgaaca caggctcgca aatatgataa 900
 ggcatttaag aattttacaa tttagatttt tttaaatcca tgaatatatt tgttctaata 960
 aaaaaaaaaa aaaa 974

<210> 1894

<211> 1043

<212> DNA

<213> Ctenocephalides felis

<400> 1894

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 tggatgagcc cgcaccagga gtagtaccta ctctgaacc tacacctgta ccgaaacccg 180
 agcaaaaatg taaaaaagta aaatttagtt gcgtgaattc gtgcagttca cccgaaatgc 240
 agtattgtcc ggaaatagga gcagatccgg ttaaggaatc ctgtagccca gatcaagtgt 300
 gcgctgatca aagtggatat ctacagtgc ccactaaaga agtacagtc tgcaaagtc 360
 aaggtttcaa atgtccgtca ccatcgagat tttatccaaa tataaatgat tgtcaaagct 420
 attattattg tgacgaaaat agtataggaa cccaatatta ttgccccgca aattttgcat 480
 atgatccggt acgtcataat tgcggaccta tggctctggg cacaaaatgc tatacagtta 540
 catgtcctgc acagcctaag gtgcttcogt acattggtga taaatcattg tacgtcgtat 600
 gtatggccgg aagaggaacc gtattgcaat gcgaagaacc cgcgcgagtt ttcccaagga 660
 gcgaaacctg tgtcgggcaa tgccgagcac gtggaaaatt tgctttcaag aacgacgcaa 720
 catgccggaa gttcttcacg tgtttacgtc ctaaaggaga gccagttcct gatcaatgtc 780
 cgattggaac agtatttaac caagctactc aaagctgcaa cacaggaact tgcgagagga 840
 aacctaaatt atattaatat attgatgaag tattcaacaa aagaaactat acaaaatatg 900
 tactttgttt tactttatgt gttatataaa aaaatattat ggttgaacac aggctcgcaa 960
 atatgataag gcatttaaga attttacaat ttagattttt ttaaattccat gaatatattt 1020
 gttctaataca aaaaaaaaaa aaa 1043

<210> 1895

<211> 1043

<212> DNA

<213> Ctenocephalides felis

<400> 1895

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 aattcttaaa tgccttatca tatttgcgag cctgtgttca accataatat ttttttatat 120
 aacacataaa gtaaaacaaa gtacatattt tgtatagttt cttttgttga atacttcac 180
 aatatattaa tataatttag gtttcctctc gcaagttcct gtgttgacgc tttgagtagc 240
 ttggttaaact actgttccaa tcggacattg atcaggaact ggctctcctt taggacgtaa 300
 acacgtgaag aacttccggc atgttgcgtc gttcttgaaa gcaaattttc cacgtgctcg 360

	165		170		175
Cys Tyr Thr Val Thr Cys Pro Ala Gln Pro Lys Val Leu Pro Tyr Ile					
	180		185		190
Gly Asp Lys Ser Leu Tyr Val Val Cys Met Ala Gly Arg Gly Thr Val					
	195		200		205
Leu Gln Cys Glu Glu Pro Ala Glu Phe Ser Pro Arg Ser Glu Thr Cys					
	210		215		220
Val Gly Gln Cys Arg Ala Arg Gly Lys Phe Ala Phe Lys Asn Asp Ala					
	225		230		235
					240
Thr Cys Arg Lys Phe Phe Thr Cys Leu Arg Pro Lys Gly Glu Pro Val					
		245		250	255
Pro Asp Gln Cys Pro Ile Gly Thr Val Phe Asn Gln Ala Thr Gln Ser					
	260		265		270
Cys Asn Thr Gly Thr Cys Glu Arg Lys Pro Lys Leu Tyr					
	275		280		285

<210> 1898
 <211> 1062
 <212> DNA
 <213> Ctenocephalides felis

<400> 1898
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 aaagaagtat ttgcatcatt ggatgagccc gcaccaggag tagtacctac tcctgaacct 180
 acacctgtac cgaaaccga gcaaaaatgt aaaaaagtaa aatttagttg cgtgaattcg 240
 tgcagttcac ccgaaatgca gtattgtccg gaaataggag cagatccggt taaggaatcc 300
 tgtagcccag atcaagtgtg cgctgatcaa agtggatatc tacagtgcac cactaaagaa 360
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 ataaatgatt gtcaaagcta ttattattgt gacgaaaata gtataggaac ccaatattat 480
 tgccccgcaa attttgcata tgatccgtta cgtcataatt gcggacctat ggctctgggc 540
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 aaatcattgt acgtogtatg tatggccgga agaggaaccg tattgcaatg cgaagaaccc 660
 gccgagtttt ccccaaggag cgaaacctgt gtcgggcaat gccgagcacg tggaaaattt 720
 gctttcaaga acgacgcaac atgccggaag ttcttcacgt gtttacgtcc taaaggagag 780
 ccagttcctg atcaatgtcc gattggaaca gtatttaacc aagctactca aagctgcaac 840
 acaggaactt gcgagaggaa acctaaatta tattaatata ttgatgaagt attcaacaaa 900
 agaaactata caaaatatgt actttgtttt actttatgtg ttatataaaa aaatattatg 960
 gttgaacaca ggctcgcaaa tatgataagg catttaagaa ttttacaatt tagatttttt 1020

taaatccatg aatatatttg ttctaataca aaaaaaaaaa aa

1062

<210> 1899

<211> 855

<212> DNA

<213> Ctenocephalides felis

<400> 1899

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gatggtgagt ttaatgtcga cggaacgcct ttaacagtaa ataaagaagt atttgcata 120
ttggatgagc cgcaccagg agtagtacct actcctgaac ctacacctgt accgaaaccc 180
gagcaaaaat gtaaaaaagt aaaatttagt tgcgtgaatt cgtgcagttc accogaaatg 240
cagtattgtc cggaaatagg agcagatccg gttaaggaat cctgtagccc agatcaagtg 300
tgcgctgata aaagtggata tctacagtgc accactaaag aaagtacagt ctgcaaagta 360
caaggtttca aatgtccgtc accatcgaga ttttatccaa atataaatga ttgtcaaagc 420
tattattatt gtgacgaaaa tagtatagga acccaatatt attgccccgc aaattttgca 480
tatgatccgt tacgtcataa ttgcggacct atggctctgg gcacaaaatg ctatacagtt 540
acatgtcctg cacagcctaa ggtgcttccg tacattggtg ataaatcatt gtacgtcgta 600
tgtatggcgg gaagaggaac cgtattgcaa tgcgaagaac ccgccgagtt ttccccaagg 660
agcgaaacct gtgtcgggca atgccgagca cgtggaaaat ttgctttcaa gaacgacgca 720
acatgccgga agttcttcac gtgtttacgt cctaaaggag agccagttcc tgatcaatgt 780
ccgattggaa cagtatttaa ccaagctact caaagctgca acacaggaac ttgcgagagg 840
aaacctaaat tatat 855

<210> 1900

<211> 855

<212> DNA

<213> Ctenocephalides felis

<400> 1900

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tactgttcca atcggacatt gatcaggaac tggctctcct ttaggacgta aacacgtgaa 120
gaacttccgg catgttgogt cgttcttgaa agcaaatttt ccacgtgctc ggcattgccc 180
gacacagggt tcgctccttg gggaaaactc ggcggttctc tcgcattgca atacggttcc 240
tcttccggcc atacatacga cgtacaatga tttatcacca atgtacgga gcacctagg 300
ctgtgcagga catgtaactg tatagcattt tgtgcccaga gccataggtc cgcaattatg 360
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gtcacaataa taatagcttt gacaatcatt tataatttga taaaatctcg atggtgacgg 480
acatttgaaa ccttggtactt tgcagactgt actttcttta gtggtgcaact gtagatatcc 540
actttgatca gcgcacactt gatctgggct acaggattcc ttaaccggat ctgctcctat 600
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<210> 1901
 <211> 1875
 <212> DNA
 <213> Ctenocephalides felis

<220>
 <221> CDS
 <222> (44)..(1633)

<400> 1901

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                                         Met Asp Ser Asn
                                         1

acg ggg att caa ata ata gct tcc aaa gaa cca aaa cca agg cag ttt 103
Thr Gly Ile Gln Ile Ile Ala Ser Lys Glu Pro Lys Pro Arg Gln Phe
  5              10              15              20

gaa gat gcg ttg gca ctc aca ggt ttt gga aaa ttc aat tac ctt ctt 151
Glu Asp Ala Leu Ala Leu Thr Gly Phe Gly Lys Phe Asn Tyr Leu Leu
              25              30              35

ctg gtc gtg agt gga tgc gta tta gta tgt gtt ttg atg gaa act ctt 199
Leu Val Val Ser Gly Cys Val Leu Val Cys Val Leu Met Glu Thr Leu
              40              45              50

gga atg agt ttt gtc gtt cct tca gca caa tgt gat ctg gaa tta aca 247
Gly Met Ser Phe Val Val Pro Ser Ala Gln Cys Asp Leu Glu Leu Thr
              55              60              65

aca aaa caa aaa gga ata tta agc gct ata gct ttt ata ggt att ata 295
Thr Lys Gln Lys Gly Ile Leu Ser Ala Ile Ala Phe Ile Gly Ile Ile
              70              75              80

agc agt tca cat tta tgg gga ttt tta gcc gat acg aga ggg agg cgg 343
Ser Ser Ser His Leu Trp Gly Phe Leu Ala Asp Thr Arg Gly Arg Arg
              85              90              95              100

aaa gtg att atg cct aca ctt ctt ctt gca ttt ttt tgt acc ttg gca 391
Lys Val Ile Met Pro Thr Leu Leu Leu Ala Phe Phe Cys Thr Leu Ala
              105              110              115

tct agt ttt gta aat tca gtt tgg ctg ttt att ttg ctg cga tat ttc 439
Ser Ser Phe Val Asn Ser Val Trp Leu Phe Ile Leu Leu Arg Tyr Phe
              120              125              130

aat gga ttt ttc gta tct gga gga agt gca aca ata tat gca tat tta 487

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Asn Gly Phe Phe Val Ser Gly Gly Ser Ala Thr Ile Tyr Ala Tyr Leu
135 140 145

gga gaa ttt cat aat cct agg cat cgc agc agg gct att atg gga gcg 535
Gly Glu Phe His Asn Pro Arg His Arg Ser Arg Ala Ile Met Gly Ala
150 155 160

tca agc atc ttc gga ttt gcg tgt ctt gca tta ccg acg gtt gca tgg 583
Ser Ser Ile Phe Gly Phe Ala Cys Leu Ala Leu Pro Thr Val Ala Trp
165 170 175 180

tta att ata aat cag aaa tgg tca ttc tat att gac ttt ttg gga tat 631
Leu Ile Ile Asn Gln Lys Trp Ser Phe Tyr Ile Asp Phe Leu Gly Tyr
185 190 195

aca tac aag ccc tgg agg ttg tat atg gtt gca tgt ggt ttg cca tca 679
Thr Tyr Lys Pro Trp Arg Leu Tyr Met Val Ala Cys Gly Leu Pro Ser
200 205 210

ctg ctt tgt tgt ttt gct ttg tgg aaa tta cca gaa agt ccc aaa ttt 727
Leu Leu Cys Cys Phe Ala Leu Trp Lys Leu Pro Glu Ser Pro Lys Phe
215 220 225

ttg atg aat cag gga aga aac gaa gaa gct cgt caa att att gcc aaa 775
Leu Met Asn Gln Gly Arg Asn Glu Glu Ala Arg Gln Ile Ile Ala Lys
230 235 240

atg tat aga att aat act ggt aaa cca gaa agt gaa ttc ccc gta tca 823
Met Tyr Arg Ile Asn Thr Gly Lys Pro Glu Ser Glu Phe Pro Val Ser
245 250 255 260

tca atc tta gat gaa tat cca gga gtg gat ggt gaa aat aca aat aaa 871
Ser Ile Leu Asp Glu Tyr Pro Gly Val Asp Gly Glu Asn Thr Asn Lys
265 270 275

aca aag aaa tca ttt tta aga act gta tgg gat caa act gct ccg ctg 919
Thr Lys Lys Ser Phe Leu Arg Thr Val Trp Asp Gln Thr Ala Pro Leu
280 285 290

ttt atg ggt gag cac atg aaa aaa aca ctc att gca tgt act ctg caa 967
Phe Met Gly Glu His Met Lys Lys Thr Leu Ile Ala Cys Thr Leu Gln
295 300 305

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310 315 320

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Lys Gln Val Asp Arg Arg Thr Ser Ile Ala Ser Tyr Gly Pro
520 525 530

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<210> 1902

<211> 530

<212> PRT

<213> Ctenocephalides felis

<400> 1902

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35 40 45

Met Glu Thr Leu Gly Met Ser Phe Val Val Pro Ser Ala Gln Cys Asp
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Leu Glu Leu Thr Thr Lys Gln Lys Gly Ile Leu Ser Ala Ile Ala Phe
65 70 75 80

Ile Gly Ile Ile Ser Ser Ser His Leu Trp Gly Phe Leu Ala Asp Thr
85 90 95

Arg Gly Arg Arg Lys Val Ile Met Pro Thr Leu Leu Leu Ala Phe Phe
100 105 110

Cys Thr Leu Ala Ser Ser Phe Val Asn Ser Val Trp Leu Phe Ile Leu
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Leu Arg Tyr Phe Asn Gly Phe Phe Val Ser Gly Gly Ser Ala Thr Ile
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Tyr Ala Tyr Leu Gly Glu Phe His Asn Pro Arg His Arg Ser Arg Ala

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Phe Leu Gly Tyr Thr Tyr Lys Pro Trp Arg Leu Tyr Met Val Ala Cys						
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Ser Pro Lys Phe Leu Met Asn Gln Gly Arg Asn Glu Glu Ala Arg Gln						
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Ile Ile Ala Lys Met Tyr Arg Ile Asn Thr Gly Lys Pro Glu Ser Glu						
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Phe Pro Val Ser Ser Ile Leu Asp Glu Tyr Pro Gly Val Asp Gly Glu						
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Asn Thr Asn Lys Thr Lys Lys Ser Phe Leu Arg Thr Val Trp Asp Gln						
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Thr Ala Pro Leu Phe Met Gly Glu His Met Lys Lys Thr Leu Ile Ala						
	290		295		300	
Cys Thr Leu Gln Phe Gly Ile Phe Ala Thr Ser Asn Gly Met Tyr Met						
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Trp Phe Pro Asp Ile Ile Ser Lys Met Thr Glu Phe Gln Asn Ala His						
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Pro Gly Val Pro Ser Thr Ile Cys Tyr Val Val Gln Asn Ser Ser Met						
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Leu Arg Ala Asp Asp Phe Ile Asp Thr Thr Asn Ser Thr Thr Glu Cys						
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Lys Asp Thr Met Glu Glu Gln Ala Phe Met His Ser Leu Met Leu Glu						
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	385		390		395	400
Val Gly Lys Leu Pro Ile Leu Val Phe Val Met Val Ser Cys Gly Ile						

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<210> 1904

<211> 1590

<212> DNA

<213> *Ctenocephalides felis*

<400> 1904

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<210> 1905

<211> 1590

<212> DNA

<213> Ctenocephalides felis

<400> 1905

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tgctattgtt aaatgttcaa taaatgcaca aattattcca caaatccgc atgagaccat 360
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<210> 1906

<211> 381

<212> DNA

<213> Ctenocephalides felis

<400> 1906

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<210> 1907

<211> 381

<212> DNA

<213> Ctenocephalides felis

<400> 1907

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<210> 1908

<211> 2191

<212> DNA

<213> Ctenocephalides felis

<400> 1908

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<210> 1910

<211> 1968

<212> DNA

<213> Ctenocephalides felis

<400> 1910

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<210> 1911

<211> 1968

<212> DNA

<213> Ctenocephalides felis

<400> 1911

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<400> 1914

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aaatcaatta attttttttaa aatcttagaa atgaatttaa agcagct atg gag aaa 176
Met Glu Lys

1

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Tyr Pro Leu Lys Gly Asn Ser Thr Ile Arg Leu Ser Gly Pro Ala Ser
5 10 15

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40 45 50

gga ccc caa cag cat aat cca gtg tcg gac tcg ggc gat ttt tcg cca 368
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55 60 65

gac gaa ttc ggc aaa cgt ata ttt cct ccc gga tcc aca cag ttg acc 416
Asp Glu Phe Gly Lys Arg Ile Phe Pro Pro Gly Ser Thr Gln Leu Thr
70 75 80

ctg gat gat gat aat gga tca gca aat ttg gca att aaa ttt gag ggt 464
Leu Asp Asp Asp Asn Gly Ser Ala Asn Leu Ala Ile Lys Phe Glu Gly
85 90 95

ctt tct agt ggt ggc ata tca ttt gct ggt atg caa gct gaa agc gat 512
Leu Ser Ser Gly Gly Ile Ser Phe Ala Gly Met Gln Ala Glu Ser Asp
100 105 110 115

gat att cct ggg att ggg caa tat gat gat ttc cat acg ata gat tgg 560
Asp Ile Pro Gly Ile Gly Gln Tyr Asp Asp Phe His Thr Ile Asp Trp
120 125 130

caa cgt gat ata gcc aga gat cga atg aga cat cga tat att gtt aaa 608
Gln Arg Asp Ile Ala Arg Asp Arg Met Arg His Arg Tyr Ile Val Lys

CCCTGCGGCTGTTT

135	140	145	
aaa cga caa gac tct ata cta gac ctg ata aag ggt gcc cat gat gcc			656
Lys Arg Gln Asp Ser Ile Leu Asp Leu Ile Lys Gly Ala His Asp Ala			
150	155	160	
tgg tca ggt tgg gtg tgt gtt ctc cta gtc ggg ctg gtg aca gga gct			704
Trp Ser Gly Trp Val Cys Val Leu Leu Val Gly Leu Val Thr Gly Ala			
165	170	175	
att gca ggc gtc ata gat atc gga gca agt tgg atg acg gat tta aag			752
Ile Ala Gly Val Ile Asp Ile Gly Ala Ser Trp Met Thr Asp Leu Lys			
180	185	190	195
aac ggt gtt tgc cca caa gca ttc tgg ttg aat aga gaa caa tgt tgt			800
Asn Gly Val Cys Pro Gln Ala Phe Trp Leu Asn Arg Glu Gln Cys Cys			
200	205	210	
tgg tca ttg aat gaa aca acc ttt gat gat gga aat tgc tca caa tgg			848
Trp Ser Leu Asn Glu Thr Thr Phe Asp Asp Gly Asn Cys Ser Gln Trp			
215	220	225	
ctg act tgg cct gag gtt ttc gga caa cct aga act ggg gcg ggg gct			896
Leu Thr Trp Pro Glu Val Phe Gly Gln Pro Arg Thr Gly Ala Gly Ala			
230	235	240	
tac ata att got tat ttg ttt tat att att tgg gca ttg att ttt gct			944
Tyr Ile Ile Ala Tyr Leu Phe Tyr Ile Ile Trp Ala Leu Ile Phe Ala			
245	250	255	
tct ttg gca gcc tct ttg gtg cgc atg ttt gca cct tat gct tgt ggg			992
Ser Leu Ala Ala Ser Leu Val Arg Met Phe Ala Pro Tyr Ala Cys Gly			
260	265	270	275
tca ggt ata cca gag att aaa acc att ctg agt ggt ttc atc atc aga			1040
Ser Gly Ile Pro Glu Ile Lys Thr Ile Leu Ser Gly Phe Ile Ile Arg			
280	285	290	
gga tat ctt gga aaa tgg aca ttg att att aaa agt gta gga atc atg			1088
Gly Tyr Leu Gly Lys Trp Thr Leu Ile Ile Lys Ser Val Gly Ile Met			
295	300	305	
ttg tct gta tca gct gga ttg agt ttg ggt aaa gaa ggt cct atg gta			1136
Leu Ser Val Ser Ala Gly Leu Ser Leu Gly Lys Glu Gly Pro Met Val			
310	315	320	
cac att gcc agc tgt ata ggt aat ata ttg tct tat tta ttt cct aaa			1184
His Ile Ala Ser Cys Ile Gly Asn Ile Leu Ser Tyr Leu Phe Pro Lys			

335

act gat gtt aaa tca gct ata gaa ata gca gca gct ggt cct ggt gtc 1760
Thr Asp Val Lys Ser Ala Ile Glu Ile Ala Ala Ala Gly Pro Gly Val

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Tyr Gln Ala Val Trp Leu Leu Leu Ile Ala Leu Val Leu Lys Leu Gly						
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Met Thr Val Phe Thr Phe Gly Met Lys Val Pro Cys Gly Leu Phe Ile						
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cca agt tta tgc cta gga gct att atg ggt aga att gtg ggc att gga						1904
Pro Ser Leu Cys Leu Gly Ala Ile Met Gly Arg Ile Val Gly Ile Gly						
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Ile Glu Gln Leu Ala Tyr Tyr Tyr Pro Lys Leu Trp Phe Phe Ser Gly						
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gaa tgc tca act gga gac aat tgc atc aca ccg ggc ctg tat gct atg						2000
Glu Cys Ser Thr Gly Asp Asn Cys Ile Thr Pro Gly Leu Tyr Ala Met						
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gtg ggc gct gca gct gtt tta ggt ggt gtc act aga atg aca gtt tct						2048
Val Gly Ala Ala Val Leu Gly Gly Val Thr Arg Met Thr Val Ser						
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Leu Val Val Ile Met Phe Glu Leu Thr Gly Gly Val Arg Tyr Ile Val						
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ccc tta atg gca gca gct atg gct tcc aaa tgg gtt ggt gat gct ttg						2144
Pro Leu Met Ala Ala Ala Met Ala Ser Lys Trp Val Gly Asp Ala Leu						
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ggc aga cag ggt ata tat gat gcc cat ata cag ctt aat gga tat cca						2192
Gly Arg Gln Gly Ile Tyr Asp Ala His Ile Gln Leu Asn Gly Tyr Pro						
660		665		670		675
ttc ttg gac agt aaa gat gaa ttt gca cat aca tct tta gct gca gat						2240
Phe Leu Asp Ser Lys Asp Glu Phe Ala His Thr Ser Leu Ala Ala Asp						
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Val Met Gln Pro Lys Arg Asn Glu Thr Leu Ser Val Ile Thr Gln Asp						
	695		700		705	
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<210> 1915

<211> 851

<212> PRT

<213> Ctenocephalides felis

<400> 1915

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Thr Asn His Ile Val Glu Arg Val Asp His Pro Leu Ser Gly Thr Met
35 40 45

Pro Ser Asp Gly Pro Gln Gln His Asn Pro Val Ser Asp Ser Gly Asp
50 55 60

Phe Ser Pro Asp Glu Phe Gly Lys Arg Ile Phe Pro Pro Gly Ser Thr
65 70 75 80

Gln Leu Thr Leu Asp Asp Asp Asn Gly Ser Ala Asn Leu Ala Ile Lys
85 90 95

Phe Glu Gly Leu Ser Ser Gly Gly Ile Ser Phe Ala Gly Met Gln Ala
100 105 110

Glu Ser Asp Asp Ile Pro Gly Ile Gly Gln Tyr Asp Asp Phe His Thr
115 120 125

Ile Asp Trp Gln Arg Asp Ile Ala Arg Asp Arg Met Arg His Arg Tyr
130 135 140

Ile Val Lys Lys Arg Gln Asp Ser Ile Leu Asp Leu Ile Lys Gly Ala
145 150 155 160

His Asp Ala Trp Ser Gly Trp Val Cys Val Leu Leu Val Gly Leu Val
165 170 175

Thr Gly Ala Ile Ala Gly Val Ile Asp Ile Gly Ala Ser Trp Met Thr
180 185 190

Asp Leu Lys Asn Gly Val Cys Pro Gln Ala Phe Trp Leu Asn Arg Glu
195 200 205

Gln Cys Cys Trp Ser Leu Asn Glu Thr Thr Phe Asp Asp Gly Asn Cys
210 215 220

Ser Gln Trp Leu Thr Trp Pro Glu Val Phe Gly Gln Pro Arg Thr Gly
225 230 235 240

Ala Gly Ala Tyr Ile Ile Ala Tyr Leu Phe Tyr Ile Ile Trp Ala Leu
245 250 255

Ile Phe Ala Ser Leu Ala Ala Ser Leu Val Arg Met Phe Ala Pro Tyr
260 265 270

Ala Cys Gly Ser Gly Ile Pro Glu Ile Lys Thr Ile Leu Ser Gly Phe
275 280 285

Ile Ile Arg Gly Tyr Leu Gly Lys Trp Thr Leu Ile Ile Lys Ser Val
290 295 300

Gly Ile Met Leu Ser Val Ser Ala Gly Leu Ser Leu Gly Lys Glu Gly
305 310 315 320

Pro Met Val His Ile Ala Ser Cys Ile Gly Asn Ile Leu Ser Tyr Leu
325 330 335

Phe Pro Lys Tyr Gly Arg Asn Glu Ala Lys Lys Arg Glu Ile Leu Ser
340 345 350

Ala Ala Ala Ala Ala Gly Val Ser Val Ala Phe Gly Ala Pro Ile Gly
355 360 365

Gly Val Leu Phe Ser Leu Glu Glu Val Ser Tyr Tyr Phe Pro Leu Lys
370 375 380

Thr Leu Trp Arg Ser Phe Phe Cys Ala Leu Ile Ala Ala Phe Ile Leu
385 390 395 400

Arg Ser Ile Asn Pro Phe Gly Asn Glu His Ser Val Leu Phe Tyr Val
405 410 415

Glu Tyr Asn Lys Pro Trp Ile Phe Phe Glu Leu Ile Pro Phe Ile Gly
420 425 430

Leu Gly Ile Ile Gly Gly Val Val Ala Thr Leu Phe Ile Lys Ala Asn
435 440 445

Leu Tyr Trp Cys Arg Tyr Arg Lys Phe Ser Lys Leu Gly Gln Tyr Pro
450 455 460

Val Ala Glu Val Leu Val Val Ala Val Ala Thr Ala Val Ile Ala Tyr
465 470 475 480

Leu Val Gly Phe Val Leu Arg Arg Asp Leu Asn Leu Ala Ile Ala Asn
740 745 750

Ala Arg Arg Met Ile Asp Gly Ile Thr Gly Gln Ser Leu Val Leu Phe
755 760 765

Ile Asn Gly Pro Thr Val Gln Ser Leu Gly Pro Pro Pro Leu Lys Leu
770 775 780

Lys Lys Ile Leu Asp Met Ala Pro Ile Thr Val Thr Asp Gln Thr Pro
785 790 795 800

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805 810 815

Leu Val Thr His Asn Gly Arg Leu Leu Gly Val Ile Thr Lys Lys Asp
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Leu Phe Asn
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<210> 1916

<211> 3126

<212> DNA

<213> Ctenocephalides felis

<400> 1916

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cattaaaagg aaattctacg atacgtttta gtggtcctgc ttcttatcaa tcggttacta 240
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<210> 1917

<211> 2553

<212> DNA

<213> Ctenocephalides felis

<400> 1917

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<210> 1918

<211> 2553

<212> DNA

<213> Ctenocephalides felis

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CFU/ml) 23. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 24. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 25. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 26. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 27. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 28. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 29. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 30. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 31. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 32. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 33. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 34. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 35. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 36. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 37. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 38. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 39. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 40. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 41. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 42. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 43. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 44. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 45. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 46. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 47. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 48. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 49. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 50. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 51. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 52. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 53. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 54. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 55. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 56. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 57. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 58. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 59. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 60. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 61. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 62. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 63. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 64. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 65. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 66. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 67. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 68. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 69. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 70. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 71. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 72. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 73. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 74. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 75. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 76. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 77. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 78. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 79. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 80. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 81. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 82. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 83. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 84. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 85. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 86. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 87. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 88. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 89. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 90. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 91. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 92. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 93. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 94. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 95. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 96. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 97. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 98. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 99. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 100. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) </p>		<p> 1. <i>Staphylococcus aureus</i> (10⁸ CFU/ml) 2. <i>Escherichia coli</i> (10⁸ CFU/ml) 3. <i>Salmonella enterica</i> (10⁸ CFU/ml) 4. <i>Pseudomonas aeruginosa</i> (10⁸ CFU/ml) 5. <i>Acinetobacter baumannii</i> (10⁸ CFU/ml) 6. <i>Klebsiella pneumoniae</i> (10⁸ CFU/ml) 7. <i>Moraxella catarrhalis</i> (10⁸ CFU/ml) 8. <i>Neisseria meningitidis</i> (10⁸ CFU/ml) 9. <i>Streptococcus pneumoniae</i> (10⁸ CFU/ml) 10. <i>Haemophilus influenzae</i> (10⁸ CFU/ml) 11. <i>Legionella pneumophila</i> (10⁸ CFU/ml) 12. <i>Campylobacter jejuni</i> (10⁸ CFU/ml) 13. <i>Yersinia enterocolitica</i> (10⁸ CFU/ml) 14. <i>Shigella flexneri</i> (10⁸ CFU/ml) 15. <i>Enterobacteriaceae</i> (10⁸ CFU/ml) 16. <i>Enterococcus faecalis</i> (10⁸ CFU/ml) 17. <i>Enterococcus faecium</i> (10⁸ CFU/ml) 18. <i>Enterococcus gallinarum</i> (10⁸ CFU/ml) 19. <i>Enterococcus hirshii</i> (10⁸ CFU/ml) 20. <i>Enterococcus mundtii</i> (10⁸ CFU/ml)</p>
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<210> 1919
<211> 1181

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 Tyr Val Val Thr Asp Thr Pro Ser Arg Pro Arg Val Ala Glu Glu Gln
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 Ala Gly Gly Tyr Pro Gly Ser Asp Tyr Ser Tyr Thr Ser Glu Arg Ser
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 Ser Lys Asn Trp Arg Trp Thr Arg
 95 100
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CG9196-1201

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gtcttcttca attttgataa acatattttt ataactctgtg ttaaattttg cacttgtaat 1122
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<210> 1920

<211> 102

<212> PRT

<213> Ctenocephalides canis

<400> 1920

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Pro	Ala	Leu	Ser	Ser	Tyr	Ser	Val	Thr	Thr	Pro	Ser	Arg	His	Tyr	Val
			20					25					30		

Val	Thr	Asp	Thr	Pro	Ser	Arg	Pro	Arg	Val	Ala	Glu	Glu	Gln	Tyr	Ser
		35					40					45			

Tyr	Ser	Tyr	Arg	Ser	Gln	Gln	Glu	Arg	Ser	Ser	Ala	Asp	Pro	Tyr	Gly
	50					55					60				

Arg	Asn	Tyr	Ser	Thr	Thr	Ser	Thr	Thr	Glu	Ser	Thr	Arg	Arg	Ala	Gly
65					70					75					80

Gly	Tyr	Pro	Gly	Ser	Asp	Tyr	Ser	Tyr	Thr	Ser	Glu	Arg	Ser	Ser	Lys
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<210> 1921

<211> 1181

<212> DNA

<213> Ctenocephalides felis

<400> 1921

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catctattag tcctaactct tacaacatca ctattagtat ctataattat taattgcaat 180
accattacgt attttgtttc aacaaaaatt aaaacaaatt gtaaacttat atcacaagaa 240
aatttgtaca gtatcaaaaa tatgcctaatt ctttggtttt tatgataata tatctaggga 300
aaattaaaag ctaatttttag acaattttta gtagacattg ctaattaatt aaataaataa 360
aaataatatt aagttatatt aataattaca cagaatagca tattgagtct ttttctggta 420
taactttcca aggactacaa tattacatca tcctaggata tgataaaaaat cagtgatgat 480
aaaattgggt gtttgatcag aaatcatagt tttgttttac attttcagga tattaatatg 540
agtgcataaa tagtaataat aattcatagc aaaaaataa aaattataaa aaaaatttctt 600
ttagttctta tgagacttca aataaaaacc aatttatcaa aacaaaattt ttcaattttc 660
gtgtttacac acggtatgag aagtgcaggc aagtgggtcc tccaggaaga cgtccagaag 720
tagtggagct atagctggat ctgtaactac ctgggccatc tccagttctt ggatgagcgt 780
tcgctcgtgt aagaatagtc agatcctgga taacccctcg cacgtcttgt gctttcgggtg 840
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gaataaatta ataaatttca aaataacttca acaatatttt acactccgta cactgtgata 1140
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<210> 1922

<211> 306

<212> DNA

<213> Ctenocephalides felis

<400> 1922

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agggtagcgg aagagcaata ttcttactcc taccgcagcc agcaggaaag atcttctgca 180
gatccctacg gcaggaacta ttcgacaacc tccaccaccg aaagcacaag acgtgcaggg 240
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<210> 1923

<211> 306

<212> DNA

<213> Ctenocephalides felis

<400> 1923

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gggatctgca gaagatcttt cctgctggct gcggtaggag taagaatatt gctcttccgc 180
tacccttggt ctagatggag tgtcagtcac cacgtaatga cgggacggcg tcgttacgga 240
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<210> 1924

<211> 2161

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

<222> (107)..(907)

<400> 1924

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Met Thr Phe
1

gga att tca gta att ctg tta gtg tct att tgg aca aca aat act cat 163
Gly Ile Ser Val Ile Leu Leu Val Ser Ile Trp Thr Thr Asn Thr His
5 10 15

gca tat tta aca tca gtg caa gaa tta gac gat gcc ata aga gca gtg 211
Ala Tyr Leu Thr Ser Val Gln Glu Leu Asp Asp Ala Ile Arg Ala Val
20 25 30 35

gtg tca cgg atg cat cga gta gcc gat att gaa agt ggt ggc gaa tac 259
Val Ser Arg Met His Arg Val Ala Asp Ile Glu Ser Gly Gly Glu Tyr
40 45 50

tca gat ctg gga gta gac ttc cca gta ccc gca att cca cga tct caa 307
Ser Asp Leu Gly Val Asp Phe Pro Val Pro Ala Ile Pro Arg Ser Gln
55 60 65

aaa gct cta gaa tcg gat tcg gaa tat gat tcc ata ttc gat gaa ggc 355
Lys Ala Leu Glu Ser Asp Ser Glu Tyr Asp Ser Ile Phe Asp Glu Gly
70 75 80

cag tta cat cct agc ctc aga gat cag gaa tat ctc cag cat agt cct 403
Gln Leu His Pro Ser Leu Arg Asp Gln Glu Tyr Leu Gln His Ser Pro
85 90 95

cta tgg ggt cag cag tac gta agt gga ggc gct ggt gaa ggc caa caa 451
Leu Trp Gly Gln Gln Tyr Val Ser Gly Gly Ala Gly Glu Gly Gln Gln

tattaccggt taaaaccctt tattogaagg agaattaaga actaataaaa caatgtttaa 1177
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gacatagata taagtaatta tatttatcaa gcaaactact tcgtatcatt tctattatgg 1837
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tgtataatta aatttagaat acttttcgtg aactgtaata atttactcac agttcatgct 1957
aacgatcatg tgtctaaata caattatgaa gaagattata tattacatac atgtgaaatc 2017
tatataataa tgcattgcttg ttaaatttat attataatga atatataatg aatattttta 2077
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<210> 1925

<211> 267

<212> PRT

<213> Ctenocephalides felis

<400> 1925

Met Thr Phe Gly Ile Ser Val Ile Leu Leu Val Ser Ile Trp Thr Thr

1

5

10

15

Asn Thr His Ala Tyr Leu Thr Ser Val Gln Glu Leu Asp Asp Ala Ile

20

25

30

Arg	Ala	Val	Val	Ser	Arg	Met	His	Arg	Val	Ala	Asp	Ile	Glu	Ser	Gly			
		35					40					45						
Gly	Glu	Tyr	Ser	Asp	Leu	Gly	Val	Asp	Phe	Pro	Val	Pro	Ala	Ile	Pro			
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Arg	Ser	Gln	Lys	Ala	Leu	Glu	Ser	Asp	Ser	Glu	Tyr	Asp	Ser	Ile	Phe			
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His	Ser	Pro	Leu	Trp	Gly	Gln	Gln	Tyr	Val	Ser	Gly	Gly	Ala	Gly	Glu			
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Gly	Gln	Gln	Arg	Leu	Lys	Pro	Asp	Gly	Ser	Ala	Met	Asn	His	Gln	Gln			
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Val	Lys	Thr	Asp	Asn	Leu	Pro	Ala	Tyr	Cys	Asn	Pro	Pro	Asn	Pro	Cys			
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Pro	Val	Gly	Leu	Thr	Glu	Glu	His	Gly	Cys	Thr	Glu	Asn	Phe	Glu	Asn			
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			165					170						175				
Asp	Gly	Glu	His	Met	Phe	Arg	Cys	Pro	Ser	Ser	Leu	Asp	Gly	Asp	Glu			
		180					185						190					
Leu	Asp	Asp	Ser	Ser	Glu	Ser	Asp	Glu	Gln	Asp	Glu	His	Gln	Asp	Leu			
		195					200					205						
Leu	Asp	Met	Glu	Gly	Gly	Leu	Asp	Thr	Arg	Thr	Ala	Pro	Glu	Ile	Phe			
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His	Lys	Arg	Lys	Ser	Thr	Asn	Pro	Tyr	Leu	His	Gly	Glu	Lys	Leu	Pro			
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<210> 1926
 <211> 2161
 <212> DNA
 <213> *Ctenocephalides felis*

<400> 1926

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attgtattta gacacatgat cgtttagcatg aactgtgagt aaattattac agttcacgaa 240
aagtattcta aatttaatta tacatttata ttttaaaaat attttgagat gttttgttca 300
cattagtata tcattattat atatccataa tagaaatgat acgaagtgat ttgcttgata 360
aatataatta cttatatcta tgtcaaatag tgaatgcaaa tcttaaaaaca tacacttatt 420
tcattaaaca cgtatcgtgc actcattgcg tgtaatgtct attacaaaaa tcggataata 480
caatacatta caatgggttc ataatatatt aaattatgga aattataaat gaacattgca 540
cggatacaag agcatcaatg gggctctgaaa cacgttcacc gaaancangt gtaagtttyc 600
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gcgcattgat ggagactata tttgaaatcg tcctggggta cggaacaaac ttgcaaataa 780
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cactgatgtt aaatatgcat gagtatttgt tgtccaaata gacactaaca gaattactga 2040
aattccgaaa gtcacgtgtt aatcgcttgc cagtggagat cactgtgtac taactccag 2100
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c

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<210> 1927
 <211> 801
 <212> DNA

<213> Ctenocephalides felis

<400> 1927

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cgagtagccg atattgaaag tgggtggcgaa tactcagatc tgggagtaga cttcccagta 180
cccgcaattc cacgatctca aaaagctcta gaatcggatt cggaatatga ttccatattc 240
gatgaaggcc agttacatcc tagcctcaga gatcaggaat atctccagca tagtcctcta 300
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ggaagtgcaa tgaatcatca gcaagtaaaa acggataatc tgcccgcctta ttgtaatcca 420
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cctgaaatct tcatggcgca aaggagtagc cgacgatctg gcttgagtgg gaataaacat 720
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<210> 1928

<211> 801

<212> DNA

<213> Ctenocephalides felis

<400> 1928

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ttgcgccatg aagatttcag ggcagttcg agtatcaagt ccgccttcca tgtccagaag 180
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<210> 1929

<211> 741

<212> DNA

<213> Ctenocephalides felis

<220>

<221> CDS

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1 5 10 15

tca cgg atg cat cga gta gcc gat att gaa agt ggt ggc gaa tac tca 96
Ser Arg Met His Arg Val Ala Asp Ile Glu Ser Gly Gly Glu Tyr Ser
20 25 30

gat ctg gga gta gac ttc cca gta ccc gca att cca cga tct caa aaa 144
Asp Leu Gly Val Asp Phe Pro Val Pro Ala Ile Pro Arg Ser Gln Lys
35 40 45

gct cta gaa tcg gat tcg gaa tat gat tcc ata ttc gat gaa ggc cag 192
Ala Leu Glu Ser Asp Ser Glu Tyr Asp Ser Ile Phe Asp Glu Gly Gln
50 55 60

tta cat cct agc ctc aga gat cag gaa tat ctc cag cat agt cct cta 240
 Leu His Pro Ser Leu Arg Asp Gln Glu Tyr Leu Gln His Ser Pro Leu
 65 70 75 80

tgg ggt cag cag tac gta agt gga ggc gct ggt gaa ggc caa caa agg 288
Trp Gly Gln Gln Tyr Val Ser Gly Gly Ala Gly Glu Gly Gln Gln Arg
85 90 95

ctc aaa cca gat gga agt gca atg aat cat cag caa gta aaa acg gat 336
Leu Lys Pro Asp Gly Ser Ala Met Asn His Gln Gln Val Lys Thr Asp
100 105 110

aat ctg ccc gct tat tgt aat cca cct aat ccc tgt cct gtt gga tta 384
Asn Leu Pro Ala Tyr Cys Asn Pro Pro Asn Pro Cys Pro Val Gly Leu
115 120 125

aca gaa gag cat ggt tgc acc gag aac ttc gag aac acc gca gcc ttc 432
Thr Glu Glu His Gly Cys Thr Glu Asn Phe Glu Asn Thr Ala Ala Phe
130 135 140

agc cgc gac tac cag gcg gct cag caa tgc atg tgc gac ggt gag cat 480
Ser Arg Asp Tyr Gln Ala Ala Gln Gln Cys Met Cys Asp Gly Glu His
145 150 155 160

atg ttc cgt tgt ccg tcc tca tta gac gga gac gaa ctg gac gac tca 528
Met Phe Arg Cys Pro Ser Ser Leu Asp Gly Asp Glu Leu Asp Asp Ser
165 170 175

tcc gaa tca gac gaa cag gac gaa cac cag gac ctt ctg gac atg gaa 576

115	120	125
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130	135	140
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145	150	155 160
Met Phe Arg Cys Pro Ser Ser Leu Asp Gly Asp Glu Leu Asp Asp Ser		
165	170	175
Ser Glu Ser Asp Glu Gln Asp Glu His Gln Asp Leu Leu Asp Met Glu		
180	185	190
Gly Gly Leu Asp Thr Arg Thr Ala Pro Glu Ile Phe Met Ala Gln Arg		
195	200	205
Glu Tyr Arg Arg Ser Gly Leu Ser Gly Asn Lys His His Lys Arg Lys		
210	215	220
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<210> 1931
 <211> 741
 <212> DNA
 <213> Ctenocephalides felis

<400> 1931
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<400> 1935
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<210> 1936
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1936
caatttttaa cgcattccacg accg 24

<210> 1937
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1937
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<210> 1938
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1938
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<210> 1939
<211> 40
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1939

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40

<210> 1940

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1940

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32

<210> 1941

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1941

gtctggaagc tcaggaagag g

21

<210> 1942

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
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<400> 1942

gtaatatgcg tgacaatcgt gtgg

24

<210> 1943
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<400> 1943
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<210> 1944
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Primer

<400> 1944
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<210> 1945
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Primer

<400> 1945
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<210> 1946
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Primer

<400> 1946
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<210> 1947
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Primer

<400> 1947
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<210> 1948
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Primer

<400> 1948
ccgtcgacat taaactcacc atc 23

<210> 1949
<211> 22
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Primer

<400> 1949
cgatcatgcg tctagcattg gc 22

<210> 1950
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<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1950

cccgccccag ttctaggttg tcc

23

<210> 1951

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<400> 1951

cacacccaac ctgaccaggc

20

<210> 1952

<211> 31

<212> DNA

<213> Artificial Sequence

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<400> 1952

atggatccgg caaaatatac caaagaagaa g

31

<210> 1953

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1953

atgaattcctt atattggtat cgcgtccatt

30

<210> 1954

<211> 24
<212> DNA
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Primer

<400> 1954
agtcgcatag tgcacttctg aatg

24

<210> 1955
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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Primer

<400> 1955
ctgacatctg tttccacagc tc

22

<210> 1956
<211> 24
<212> DNA
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Primer

<400> 1956
aatagtgatg ttgtaagagt tagg

24

<210> 1957
<211> 29
<212> DNA
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<400> 1957

gtttaatatt gcatgtttat tcattaaaa

29

<210> 1958

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
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<400> 1958

gcgccatgaa gatttcaggc g

21

<210> 1959

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1959

aagtgcaatg aatcatcagc aag

23